ORBIT

VOLUME 26, NUMBER 1, 1995

A co-publication of the Ontario
Institute for Studies in Education
and Nelson Canada

The Common Curriculum

The Shift to Integrated and Outcomes-Based Learning

ORBIT

A co-publication of the Ontario Institute for Studies in Education and Nelson Canada

EDITORIAL OFFICES:
ORBIT
252 Bloor Street West
Toronto, Ontario, M5S 1V6

EDITOR: Heather Berkeley
ASSISTANT EDITOR: Donna Hutchins
EDITORIAL BOARD: Paula Bourne, Amy Casey, Ardra Cole, George Dei, Angela Hildyard, Dave Hunt, Clare Kosnik, Howard Russell, Val Ross and Ruth Scott

GRAPHIC DESIGN: Helmut W. Weyerstrahs
TYPESETTING: Arnheim Typesetting & Design

Printed and bound in Canada
by Thistle Printing
on recycled paper

SUBSCRIPTION RATES:
$38.52 per subscription year (4 issues). Incl. 7% GST

To order: Mail cheque or money order to

ORBIT
P.O. Box 10, Station F
Toronto, Ontario, M4Y 2L4

Phone: (416) 696-2295
Fax: (416) 696-2263

Second Class Mail Registration Number 4511
ISSN 0030-4433 01

Canadian Publications Mail Product Agreement No. 638528

VOLUME 26, NUMBER 1 1995

The Common Curriculum

GUEST EDITORS: *Jack Miller and Ron Wideman*

1 **Introduction** – *Jack Miller and Ron Wideman*

2 **Overview: The Common Curriculum:** Policies and Outcomes, Grades 1–9, 1995 – *Ron Wideman*

Context and Philosophy

6 **Educational Requirements of the Postmodern Age:** Curriculum Renewal Within a Wider Context – *Dean Fink*

10 **Giving Voice to the Practising Professional:** How Students Learn – *Jean Hewitt*

14 **Ontario's Common Curriculum:** A Move to Outcomes-Based Learning and Integrated Programming – *Judy Coghill*

Preparing for Implementation

17 **Setting Priorities at the Toronto Board of Education:** Involving Parents in Curricular Decision-Making – *Gerry Connelly and Benjamin D. Lowinsky*

20 **Projects of the Brock Consortium:** A Grass-Roots Approach to Change – *Jack Miller*

22 **The Norfolk Board of Education's Approach to Implementation:** Practical Approaches, Partnerships, Past Practices, and Professional Growth – *Julianne West*

24 **Teacher Partnerships:** At the Heart of Implementation – *Mary Curran*

26 **The Ontario Curriculum Clearinghouse:** Sharing Resource Materials – *Lyn Sharratt and Susan Langley*

Some Approaches and Models

28 **Suggestions for Teachers:** Connecting Learning Outcomes and Integrated Curriculum – *Susan M. Drake*

32 **Curriculum Lessons from Educating Exceptional Pupils:** From Segregated Education to Inclusive Communities – *Aldona Baltakys*

35 **New Practices for Teacher Librarians:** An Outcomes-Based Activity in Information Management – *Tim Gauntley*

Outcomes-Based Education and Assessment

38 **Facing the Change:** Aligning Curriculum and Assessment – *Lorna M. Earl and J. Bradley Cousins*

44 **The Ultimate Challenge in Teaching:** Striking the Balance Between Curriculum and Assessment – Gregg Bereznick

45 **A Compelling Intersection of Curriculum and Assessment:** Student-Led Parent Conferences – *Judy Clarke*

Concerns for the Future

48 **Dialogue on the Common Curriculum, the Report of the Royal Commission on Learning, and the Minister's Announcements** – *Moderated by Ron Wideman, with panelists David Booth, Karen Hume, Jill Johnson, and Jack Miller*

NOTES FROM THE DIRECTOR

This issue of *Orbit* provides a resource for understanding the background, context, and implications of the Common Curriculum documents issued in February 1995 by the Ontario Ministry of Education and Training.

The guest editors for the issue are Dr. Jack Miller, Head of the OISE Niagara Centre, and Dr. Ron Wideman, Curriculum Project Manager of Children's and Youth Programming at TV Ontario. Jack Miller has been directly involved in the development and implementation of the Common Curriculum, particularly its emphasis on holistic and integrated learning. Ron Wideman, as an education officer with the Ministry, was responsible for co-ordinating the development and review of the *Common Curriculum: Policies and Outcomes, Grades 1–9*.

The articles included here outline the background and philosophy of the Common Curriculum and explore topics inherent in Ontario's approach — including integrated learning, linking curriculum and assessment, and parental involvement. The authors, in the tradition of the *Orbit* theme issues, represent a balance of educational researchers, classroom teachers, school administrators, Ministry officials, and board consultants. A special feature is the dialogue on the similarities and differences between the Common Curriculum and the Report of the Royal Commission on Learning.

Future *Orbit* theme issues will explore further the changes in curriculum and assessment, school structure and governance being introduced by governments and school systems.

Angela Hildyard
Director

ORBIT
Last Chance
Save 25%
When You
Order Now
$38.52

ORBIT

Last Chance
Save 25%
When You
Order Now
$38.52

Introduction

Developing this issue of *Orbit* has been just about as complex a task as was developing *The Common Curriculum: Policies and Outcomes, Grades 1–9*. We began the *Orbit* project during the 1993/94 school year, when the original Common Curriculum working document was under review. Schools and school boards were working to implement the Common Curriculum, as required by the Ministry of Education and Training, despite the fact that the Ministry curriculum document was neither final nor complete. In developing our *Orbit* issue, we faced the same problem as educators throughout the province, "How do you work with a curriculum when you do not know for sure what its final shape and wording will be like?"

At the same time, some of us were also involved in planning a professional development event on the Common Curriculum for the Ontario Council for Leadership in Educational Administration (OCLEA). We wanted our *Orbit* issue to build from the event so that there would be a wider audience for the ideas presented.

The OCLEA committee had decided that its event would not highlight "experts" from the United States. Ontario educators needed to hear from their Ontario colleagues who were developing ways to implement the fundamental features of the Common Curriculum — outcomes-based learning, heterogeneous classes, integrated learning, improved partnerships, and improved accountability. These features would not change no matter what revisions were made to the Ministry Common Curriculum document.

At the OCLEA event, held on May 5th and 6th of 1994, exciting bridges between policy and practice were shared. The articles by Gregg Bereznick, Gerry Connelly, Mary Curran, Lorna Earl, Dean Fink, and Tim Gauntley developed out of the presentations they made at the session. The other contributors to the *Orbit* issue agreed to write articles in the spirit of sharing early initiatives and experiences in outcomes-based education and integrated learning.

In January 1995, the long-awaited Report of the Royal Commission on Learning was released. The Report strongly supported the key features of the Common Curriculum and made comprehensive recommendations for the reform of elementary and secondary education in Ontario. The Ministry of Education and Training responded quickly to the Royal Commission Report. The revised Common Curriculum for Grades 1 to 9 and the revised provincial standards for mathematics and language were released on February 7, 1995 in the first of the Minister's New Foundations announcements.

GUEST EDITORS

JACK MILLER
Head, OISE Niagara Field Centre

RON WIDEMAN
Curriculum Project Manager, TVOntario
Children's and Youth Programming

Among other things, the Minister announced that the Common Curriculum would be extended to include all of elementary and secondary education from junior kindergarten to high school graduation and that there would be provincial testing in reading, writing, and mathematics at the ends of Grades 3, 6, 9, and 11. He also announced that the Ministry would take responsibility for developing Common Curriculum standards for all program areas and for developing provincial teacher-ready curriculum materials as a way to reduce duplication of effort among school boards and to ensure greater consistency in the quality of school programs province-wide.

The timelines for these initiatives are short — September 1996 has been announced as the target date for full implementation of the Common Curriculum for Grades 1 to 9 — and the challenges they present to Ontario educators are enormous. We believe that this issue of *Orbit* will provide assistance not only in implementing the Common Curriculum in Grades 1 to 9 but also in extending it to the other grades.

The organization of the issue reflects a number of topics that are fundamental to implementation:

- The Overview describes the development of the Ministry's Common Curriculum policy document.
- The Context and Philosophy section describes some of the economic, technological, and pedagogical reasons for implementing the Common Curriculum in Ontario schools. Links to the literature on educational change are provided so that readers can pursue the topics further.
- The Preparing for Implementation section provides stories of how a number of school boards and schools developed understanding and agreement by working with teacher and parent groups. There is also a description of the Ontario Curriculum Clearinghouse and its work to make resource materials widely available to teachers.
- Some Approaches and Models provides suggestions for putting outcomes-based learning and integrated learning into practice in schools and classrooms.
- The section on Outcomes-Based Education and Assessment provides guidance on what is perhaps the most challenging part of implementing the Common Curriculum — assessment, evaluation, and reporting.
- Concerns for the Future features a dialogue among Ontario educators on the connections — and tensions — between the Common Curriculum, the Report of the Royal Commission on Learning, and the New Foundations announcements made by the Minister of Education and Training.

Note: Because the contents of this issue of *Orbit* are so closely related to *The Common Curriculum: Policies and Outcomes, Grades 1–9*, and contain so many references to it, the editors recommend having a copy of the Ministry document on hand to accompany your reading. To obtain one free copy of this document you may call (416) 326-5300 in Toronto or 1(800) 668-9938 toll free in Ontario.

The Common Curriculum

Policies and Outcomes, Grades 1–9, 1995

RON WIDEMAN

Curriculum Project Manager,*
Children's and Youth Programming
Department, TVOntario

On February 7, the Ministry of Education and Training released *The Common Curriculum: Policies and Outcomes Grades 1–9, 1995*. The document was released along with *The Common Curriculum: Provincial Standards, Mathematics* and *The Common Curriculum: Provincial Standards, Language*. Together the three policy documents provide the basis for future ministry publications articulating the policies and practices of the Common Curriculum.

The Common Curriculum is a vision for education in Ontario schools that has evolved in response to the needs of students and society in a rapidly changing world. The following needs which are addressed by the Common Curriculum have been identified over the last 15 years through the ministry's consultation and research process. Schools must:

- state clearly what students will be able to do as a result of their school experiences
- provide high levels of education to all students that will prepare them for life, work, and further learning
- enable students to apply what they have learned in new situations
- actively involve parents and other interested parties
- clearly measure students' achievement
- prepare students for citizenship in a diverse society

The key features of the Common Curriculum are in tune with *For the Love of Learning: The Report of the Royal Commission on Learning, 1995*, and reflect what is being learned from educational reform initiatives in other parts of Canada and the world. Every province of Canada has either developed or is in the process of developing a common curriculum for Grades 1 to 9. While emphases and methods vary from place to place, Australia, New Zealand, Great Britain, and many parts of the United States are moving in somewhat similar directions.

Policies and Outcomes, 1995 is a revised and strengthened version of *The Common Curriculum, Grades 1–9, 1993* and *The Common Curriculum, Grades 1–9: Version for Parents and the General Public, 1993*. These original Common Curriculum documents replaced the curriculum for Grades 1 to 6 described in the *Formative Years*, 1975 and in the subject guidelines for Grades 7 to 9 developed under *Ontario Schools, Intermediate and Senior Divisions, 1984* (OSIS).

Background

The roots of the Common Curriculum go back many years (see references in *The Common Curriculum: Policies and Outcomes, Grades 1–9, 1995*, p. 15). The development of outcomes-based learning, for example, began more that 40 years ago with the work of Tyler and includes the behavioural objectives and mastery learning movements (see King & Evans, 1991). The efforts of the Ontario Ministry of Education and Training to broaden the role of the schools to serve all students, rather than just the university bound, and to fulfil a wider range of societal needs, including more adequate preparation for the world of work, extend back into the 1960s. Integrated learning was mandated for Grades 1 to 6 by *The Formative Years* in 1975 and for Grades 7 to 9 by OSIS in 1984. *Issues and Directions, 1980* introduced an image of the learner that went beyond receiving and processing information to include self-motivated problem-solving and metacognition.

During the 1980s, a number of studies criticized the Ontario education system for, among other things, being unresponsive to change, lacking accountability, and having high expectations for only some students. There were widely differing views among educators and the public about the roles and responsibilities of the school and the nature and scope of the curriculum. At the same time, rapid changes in society, technology, the global economy, and the world of work pointed to the need to reassess the curriculum to better prepare all students for the changing world in which they would live.

In 1989, therefore, the Liberal Government of the day announced its Restructuring of Education initiatives. A three-year period of extensive province-wide discussion followed during which the Ministry analysed the thousands of written responses from educators and the public to its consultation papers on the Formative Years (Grades 1–6), Transition Years (Grades 7–9), and Specialization Years (Grades 10 to graduation).

The Ministry also established an initiative on benchmarks (standards), commissioned and reviewed research, and established over 60 pilot projects in Transition Years schools. There was particular concern about Grades 7 to 9 because of the need to ease students' transition from childhood to adolescence and from elementary to secondary school. As part of this reform agenda, the destreaming of Grade 9 was mandated for September 1993.

As a result of these initiatives, by the winter of 1991/92 the Ministry had produced working papers on the Formative and Transition Years. These papers included the following fundamental concepts from which the Common Curriculum developed. The provincial curriculum for Grades 1 to 9 should:

- state clear learning outcomes for all students
- emphasize connections and applications
- focus all school activities and programs on a small number of cross-curricular outcomes
- organize around four program areas: The Arts, Language, Self and Society, and Mathematics, Science, and Technology
- identify specific outcomes for these program areas

Because the consultation process had established the need for increased curriculum continuity through the grades, the Ministry decided in the spring of 1992 to develop a Common Curriculum for all students in Grades 1 to 9 and to have the initial version of that curriculum ready during the 1992/93 school year.

Over 100 educators from school boards and the Ministry worked on the project during the summer and autumn of 1992. *The Common Curriculum, Grades 1–9* that was released in February 1993 was the result of this work. Because of criticism that the document was inaccessible to parents and the general public, a plain language version was also developed and was released in September 1993. The Ministry announced that a period of phased-in implementation would begin in September 1993, with full implementation expected in all schools by September 1996.

Review and Revision Process

The Common Curriculum, Grades 1–9, 1993 was released as a working document. The term "working document" indicated that it was not considered perfect, final, or complete. The intention was that the Common Curriculum should be revised, strengthened, and updated on a regular basis, much like a piece of computer software, based on the comments of the people using it.

The process signalled a more dynamic approach to curriculum development, implementation, and review better suited to rapidly changing times. The current pace of change in society, technology, and the world in general is so rapid that curriculum cannot remain static. Revising the curriculum periodically, based on analysis of the comments of educators, parents, and the public, builds on the curriculum's strengths and improves its weaknesses while developing much-needed understanding and agreement about curriculum across the province.

To ensure the integrity of the review process, the Ministry established a review committee composed of representatives named by the Ontario Teachers' Federation and its affiliates, the supervisory officers' associations, and the Ministry. The committee's mandate was to analyse responses to the Common Curriculum and to make recommendations on how the Common Curriculum should be revised. Research leadership and expertise were supplied by Dr. Lorna Earl, Research Director for the Scarborough Board of Education.

The review committee met about two days a month between October 1993 and June 1994. In the beginning it concentrated on developing a common understanding of its task and establishing timelines for the project. The committee discussed ways to encourage written responses to the Common Curriculum from as wide a spectrum of respondents as possible. It also defined the kinds of questions included in the invitations to respond.

Invitations to respond to *The Common Curriculum, Grades 1–9* were extended through the Ministry's *In Common* newsletter, memoranda, letters, and association publications, as well as during presentations and meetings on the Common Curriculum. The due date for receiving written responses was May 1, 1994.

> The intention was that the Common Curriculum should be revised, strengthened, and updated on a regular basis, much like a piece of computer software, based on the comments of the people using it.

The Ministry received 545 written responses to the Common Curriculum, 455 in English and 90 in French. All responses were summarized and recorded in an electronic database. The committee spent a significant part of its meetings reading and discussing the responses and the summaries. The committee produced reports from the database that outlined all the comments received on each section of the document and on particular topics such as integrated learning.

Analysing reports and developing recommendations became a progressively greater part of the committee's work during the winter and spring of 1994. Tentative recommendations were reviewed and revised at each meeting based on the continuing receipt of responses. Responses continued to be received after the May 1, 1994 deadline. Late responses were summarized and recorded in the electronic database sequentially according to the date they were received.

Following the May 30 meeting, a draft report of the committee's recommendations was produced. The report was reviewed and modified during meetings held on June 22, 23, and 24, 1994, based on analysis of responses received in the last month. The completed report was submitted to the Ministry on June 27, 1994. The Ministry published a summary of the committee's recommendations in the September/October 1994 issue of *In Common*.

During the summer of 1994, Ministry staff worked with three members of the review committee to revise the Common Curriculum based on the recommendations. All interested divisions and teams within the Ministry participated in the revision process. Editing, layout, and design work was conducted by the Ministry's Publications Unit during the autumn. A key priority was to develop a document that would speak to educators, parents, and the general public.

In October and November, 1994, the partially edited draft was shared with the Common Curriculum Implementation Committee that the Ministry had established in June of that year. The Implementation Committee included representatives named by teachers' federations, school boards' associations, supervisory officers' associations, parents' associations, community associations, business, and labour. Meetings were held with the organizations themselves to review and discuss the changes. Final changes were made in response to their comments, within the context of the review committee's recommendations.

Key Similarities

The Common Curriculum, Grades 1–9: Policies and Outcomes, 1995 is similar in many ways to the earlier versions of the Common Curriculum. For one thing, the structure of the 1995 document is similar to the 1993 documents. Part I describes the principles that are to guide classroom and school practices. Part II identifies the essential cross-curricular outcomes. Part III describes the four program areas and their specific outcomes.

The following five key features of

> “The 1995 document acknowledges the need for a common basic education that will equip all students for life, work, and further learning.”

Common Curriculum that were identified in the 1993 versions have also been maintained:

- *The Common Curriculum is outcomes based*
  Outcomes are statements describing the measurable or observable results of learning by the ends of Grades 3, 6, and 9. Time, content, learning activities, and learning resources are means for achieving outcomes, not ends in themselves.
- *The Common Curriculum is for all students*
  Every class includes students with a wide variety of experiences, strengths, and needs. Teachers have the same high expectations for all students. They use a wide variety of methods, resources, and groupings to enable all students to achieve the outcomes.
- *The Common Curriculum connects subjects, ideas, people, and things*
  The specific outcomes in the Common Curriculum are organized into broad program areas rather than subjects. Integrated learning within and among these program areas enables students to see how knowledge from various subjects is connected. It improves student's learning of subject-based skills and information by making what is learned relevant and by enabling students to apply their knowledge to interdisciplinary and real-life problems.
- *The Common Curriculum fosters collaboration among teachers, and with students, parents, and community*
  Collaboration among teachers improves the quality of service for individual students and provides the range of expertise needed for integrated learning. Collaboration among teachers, students, and parents enables students and parents to become active partners in education and teaches skills for lifelong learning. Collaboration with the community enables schools to serve community needs more effectively and provides varied resources and locations for learning.
- *The Common Curriculum provides a basis for improved accountability in education*
  The outcomes in the Common Curriculum support development of a growing body of provincial standards. Assessment of student learning is based on the outcomes and standards. Its purpose is to improve the individual student's learning. For this reason, assessment, evaluation, and reporting must be continuous and must employ a wide variety of methods. Reporting must include plans for improving the student's performance. Program improvement must be based on success in achieving the outcomes for all students.

A sixth key feature, “Excellence and Equity,” has been added in the 1995 version. Identified as two principles of education in the 1993 versions, excellence and equity are now linked together as a single key feature to highlight their connectedness. A school that is able to respond to the needs of all its students is also a school that is best able to promote educational excellence. The Common Curriculum challenges us to break down the barriers that have produced inequitable outcomes for students from some social groups, to view the diversity of Ontario society as a means to enhance all students' achievement, and to develop students who appreciate diversity and are equipped for responsible citizenship.

Key Changes

In accordance with the recommendations of the review committee, the 1995 document has been improved in the following ways: the presentation is easier to read; the connections are clearer; the explanations are stronger; the organization is simpler; and the outcomes are more manageable.

Easier to Read Presentation

People told the review committee that the February 1993 version was difficult to read. Plain language writing along with improved use of white space, graphics, and definitions in the margins have made the 1995 document more accessible. The format of the September 1993 version is used because people said they found it more welcoming. However, the specific outcomes are presented in a horizontal grid, as in the February 1993 version, because people said that this format made it easier to see the continuity of the curriculum through the Grades 3, 6, and 9.

Clearer Connections

People told the review committee that they found the 1993 Common Curriculum “faceless” because it did not contain acknowledgments, cite sources, or connect adequately to other Ministry policy documents or the literature on education. The 1995 version addresses these criticisms. It includes acknowledgments and a description of the review process. Endnotes for each section include references to educational research and literature. Appendix B identifies other Ministry policy documents that must be addressed in programs for Grades 1 to 9. In addition, there are plans to publish a bibliography organized under the key features of the Common Curriculum in future issues of *In Common*.

Stronger Explanations

People told the review committee that the rationale for change and the explanations of the key features were inadequate in the 1993 documents. The 1995 version strengthens these elements. Part I includes more information on assessment, evaluation, and reporting. Parts II and III describe the implications of outcomes-based learning and integrated learning for school practice.

The 1995 document acknowledges the need for a common basic education that will equip all students for life, work, and further learning in a changing world. At the same time it recognizes that students learn in different ways and at different rates. Differences resulting from backgrounds, learning styles, and multiple intelligences must be addressed if all students are to achieve the expected outcomes and become equipped for effective lifelong learning. Appendix A describes program considerations for ESL students. Outcomes and standards may be modified to suit the needs of identified special education students.

Simpler Organization

People told the review committee that the

> “ The content and presentation of the Common Curriculum will continue to improve based on the responses of its users. ”

organization of outcomes was unnecessarily complex in the 1993 documents. The three levels of outcomes — essential outcomes, general outcomes, and specific outcomes — prevented people from seeing the forest for the trees. They could not identify how the outcomes at the various levels were connected. Moreover, many of the general outcomes were considered cross curricular rather than program-area specific.

The outcomes in the 1995 version are presented in only two levels — essential and specific. The essential outcomes are described in Part II. They are cross curricular and stated as generic abilities rather than by subject disciplines. They apply in all program areas and are the responsibility of all teachers. The general outcomes in the 1993 version were removed from the program areas; repetition among them was eliminated and the remaining items were moved to Part II to provide a clearer description of the essential outcomes.

In the 1995 version, the specific outcomes in Part III are described by program area. The connections between the specific outcomes and the essential outcomes are demonstrated in two ways. The numbers following each specific outcome indicate the essential outcomes(s) to which it is related. Appendix C uses a standard letter and number system to identify key connections between all the essential and specific outcomes.

More Manageable Outcomes

People told the review committee that the outcomes in the 1993 documents needed substantial improvement. The outcomes were considered too vague, too wordy, and too complicated. The specific outcomes did not demonstrate development through the Grades. Many were considered too advanced for students in Grades 1 to 9.

Improving the outcomes was an important priority for the revision team. The outcomes in the 1995 document are clearer and shorter. To ensure that the outcomes can be measured or observed, the vague verbs of the 1993 versions have been replaced with demonstration verbs such as “analyse,” “make a case for,” “communicate,” and “apply.” All the specific outcomes are now accompanied by examples because the examples provided in Mathematics, Science, and Technology in the 1993 versions were applauded. The examples further clarify the outcomes, provide connections to school practice, and suggest teaching, learning, and assessment strategies.

The total number of outcomes in the 1995 document is far fewer than in the 1993 versions. All of the outcomes have been evaluated to ensure that they are appropriate for students in Grades 1 to 9. They have also been stranded to demonstrate growth through the grades. Outcomes for the lower grades are not to be achieved and forgotten. They are seen as building blocks to be used and further developed in achieving outcomes for the higher grades.

Ongoing Improvement

The changes that have been made in the Common Curriculum have improved the document substantially over the 1993 versions. The Ministry, however, does not see *The Common Curriculum: Policies and Outcomes Grades 1–9*, 1995 as a “final” document. The preface announces that it will be reviewed again beginning in 1997. The content and presentation of the Common Curriculum will continue to improve based on the responses of its users and the changing needs of students and society.

The Challenge of Implementation

The Common Curriculum: Policies and Outcomes Grades 1–9 will lead Ontario education into the 21st century. The challenge is to implement it fully by September 1996. Recent announcements by Dave Cooke, Minister of Education and Training, in response to the Report of the Royal Commission on Learning promise significant support for teachers in this endeavour. The Minister indicated that the Common Curriculum will evolve into a series of documents for junior kindergarten to graduation that will include not just outcomes and standards but also school-ready teaching materials. The goal is to ensure that high quality, consistent teaching and learning occur in all schools throughout the province.

The Minister also announced that students in Grades 3, 6, 9, and 11 will be systematically tested each year in reading, writing, and mathematics, and an independent office will be established to develop and carry out the tests and to report the results to the public.

While the development of consistent, province-wide teaching and assessment materials has positive potential, there are also dangers that must be overcome. There is a fundamental tension between the need for consistency of practice in all classrooms and the need for flexibility in each individual classroom. Because students learn in different ways and at different rates, standardizing classroom practice can prevent students from achieving their potential. Teachers certainly need support in delivering curriculum in a consistent way. They also need support in making day-to-day professional choices about teaching and assessment to meet the needs of individual students.

Over the next year and a half, the Ministry of Education and Training and its partners in education will have to meet the enormous challenge of developing provincial teaching and assessment materials that support the excellence and equity that is fundamental to the Common Curriculum. We all need to involve ourselves in that development if Ontario is to meet the needs of every student, support a culture of continuous improvement in every school, and increase public confidence in Ontario's education system.

---

* The Curriculum Project was established in February 1995 to repurpose TVOntario's curriculum programming in support of the Common Curriculum and other related education initiatives.

From 1988 to 1995, Ron Wideman served as an education officer with the Ministry of Education and Training. He co-ordinated the development and review of *The Common Curriculum: Policies and Outcomes Grades 1–9, 1995*.

REFERENCE

King, J. A., & Evans, K. M. (1991, October). Can we achieve outcome-based education? *Educational Leadership*, pp. 73–75.

Educational Requirements of the Postmodern Age

Curriculum Renewal Within a Wider Context

DEAN FINK

Leadership Consultant,
Former Superintendent, Halton
Board of Education

During a recent trip to Kharkov in the Ukraine, my guide and interpreter pointed to a large factory and commented, "this factory makes very good watches." Then he paused and smiled and said, "if this were 1965." This comment spoke eloquently of the problems of not only the Ukraine but of the entire former Soviet Union. They produce products that are antiquated and unsaleable in the western world and they are, therefore, unable to earn the capital necessary to upgrade their factories and their workforces. This Catch 22 is endemic in these societies and it is instructive to those of us who care about education in the English-speaking world.

Many of our schools are good schools "if this were 1965." The dilemma for the nineties is to move from an educational paradigm that has been highly successful in the industrial or modern age to a new and profoundly different conception of education that is appropriate for the postmodern era.

Throughout the western world, reform movements are attempting to reposition education to address better the challenges of postmodernism. The rhetoric of reform is surprisingly similar, whether it is Australia, the United Kingdom, or Nova Scotia. Educators in most Canadian provinces, as well as the United States, deal on a daily basis with legislated changes. Each has major reports in print or pending publication. Virtually all change efforts are characterized by recommendations or policy initiatives which require uniformity of curriculum, standardized testing, school-based decision making, and decentralized governance. Some initiatives are managed with some subtlety and professional involvement; others, such as in the United Kingdom, are imposed with arrogance and are rigorously challenged by professionals. While it is easy to be critical of the Ontario change process over the past few years, my international experience suggests that efforts in Ontario have been more consultative and responsive to the entire educational community than have similar programs in other jurisdictions. In this article, I attempt to describe the larger social and educational trends throughout the world, to provide a context within which one can assess Ontario's initiative towards a common core curriculum.

The Postmodern Imperative

As I prepare this article in my office at home, I am surrounded by the trappings of our changing society. I now make a living through my use of a computer, laser printer, modem, and fax machine. In the past year, I have communicated electronically with colleagues in 11 different countries, including a number which were formally behind the Iron Curtain. In a very small way, my operation is a microcosm of postmodernism. "Postmodernity is a social condition in which economic, political, organizational and even personal life come to be organized around very different principles than those of modernity.... The postmodern world is fast, complex, compressed and uncertain" (Hargreaves, 1994, p. 8).

> The conundrum for educators is how do we create organizations which prepare our children for the postmodern world while preserving their basic humanity.
>
> —Dean Fink

The conundrum for educators is how do we create organizations which prepare our children for the postmodern world while preserving their basic humanity in the midst of potentially dehumanizing principles and practices.

Reich makes the link between postmodernity and education when he says:

> There will be no national products or technologies, no national corporations, no national industries. There will no longer be national economies ... Each nation's prime assets will be its citizens' skills and insights. Each nation's primary political task will be to cope with the centrifugal forces of the global economy which tear at the ties binding citizens together — bestowing even greater wealth on the most skilled and insightful, while consigning the less skilled to a declining standard of living. (Reich, 1991, p. 3)

He contends that the real challenge for a nation "is to increase the potential value of what its citizens can add to the global economy, by enhancing their skills and capacities and by improving their means of linking those skills and capacities to the world markets" (p. 8).

The urgency to adjust to the post-capitalist (Drucker, 1993) or postmodern (Harvey, 1989) world has elevated the educational discussion from its minor role in the political and economic agenda in most western countries to a position of pre-eminence. It is this economic agenda, driven by powerful forces in our societies, which has provided the popular answer to the philosophical question, What are the purposes of education?

If one accepts the logic of corporate elites, the purpose of education is to prepare students to adapt to the technological revolution so that they will be more useful to the international corporate world. Such logic is profoundly anti-democratic and anti-individual. The free market and democracy are not necessarily synonymous. The already unconscionable gap between rich and poor has the potential to grow even wider as some adapt to the new age and others are kept from its rewards.

Clearly, an educational purpose seemingly lost in our love affair with technology and the market rhetoric of educational discourse is the notion of education for democratic citizenship. By this I don't mean compulsory oaths of allegiance and other symbolic acts of patriotism but rather an informed citizenship which sees itself with rights and responsibilities within and to a larger community. Giroux (1992) summarizes this need to refocus education when he states:

> Education reform needs to address the most basic questions of purpose and meaning. What kind of society do we want? How do we educate students for a truly democratic society? What conditions must we provide for both teachers and students for such an education to be meaningful and workable? These questions link schooling to the issues of critical citizenship, democratic community, and social justice. (p. 729)

Giroux and others (Goodlad, 1984; Hodgkinson, 1991; White, 1991) contend that education has a role to play in the moral and ethical issues of our time. While schools cannot solve problems of homelessness, drug addiction, crime, teenage pregnancy, excruciating poverty, or intolerance, they deal with these issues every day and are therefore part of the solution. Schools are increasingly being called upon to replace, or at least supplement, the support previously given to our children by the family and other agencies of society. Hodgkinson describes children in America as "truly 'endangered' species'" (p. 16). These social problems which schools deal with on a daily basis are not solely an American dilemma as teachers in Ontario know well.

It is unacceptable ... to limit the purpose of education to those learnings which meet the technocratic agenda of political and economic elites.

It is unacceptable in a public education system in a democratic society to limit the purposes of education to those learnings which meet the technocratic agenda of political and economic elites. If we as educators are to embrace reform, we must ensure that such reforms are consistent with what we know about learning and what we know about the educational requirements of the postmodern age. A quality educational system, therefore, is developed from principles of learning which enable *all* students to be successful in a postmodern age. We need to embrace a new, or at least emerging, learning paradigm. To understand this paradigm it should be viewed in contrast to the traditional and generally accepted model of learning.

The Traditional Learning Paradigm

Barker (1989) describes a paradigm as a "set of rules and regulations that establishes boundaries and tells us what to do to be successful within those boundaries" (p. 14). Reich in his book *Work of Nations* (1992) outlines the prevailing school paradigm:

> Schools mirror the national economy, with standard assembly line curriculum, divided neatly into subjects, taught in predictable units of time, arranged sequentially by grade, and controlled by standardized tests intended to weed out defective units and return for reworking. (p. 226)

One might even argue that Frederick Taylor, the popularizer of scientific management at the beginning of the century, has been the most influential educational philosopher of the 20th century. His concept of the assembly line with its division of labour, decision-making elites, and supervision for conformity provided a rationale for school organization which persists in most secondary schools today. This philosophy has resulted in schools and school systems, which, in the words of Purkey and Novak (1984), "labelled, libelled, sorted and grouped" children (p. 11). A particularly useful device for sorting students into their appropriate places has been the IQ test. One of the pioneers in the development of Intelligence Quotients was Terman, who wrote:

> Preliminary investigation indicates that an I.Q. below 70 rarely permits anything better than unskilled labour; that the range 70–80 is preeminently that of semi-skilled labour; from 80–100 that of skilled or ordinary clerical labour; from 100–110 or 115 that of the semi-professional pursuits; and above all these are the degrees of intelligence which permit one to enter the professions or the larger fields of business.
>
> Intelligence tests can tell us whether a child's native brightness corresponds more than nearly to the median. This

> information will be of great value in planning the education of a particular child and also in planning the differentiated curriculum. (1922)

Intelligence, therefore, was considered an unchanging trait which was normatively distributed in the general population. Some people were smart, some of average intelligence, and others were, by degrees, less intelligent. Intelligence, then, became that which was measured by IQ tests. This led to a very narrow definition of human intelligence and potential. Tests, to a greater or lesser degree, focussed on what Gardner (1982) would call "logical mathematical" intelligence.

This paradigm of intelligence led to the belief that learning is sequential, that it is an individual activity, and that it occurs best without the assistance of tools such as calculators. A certain hierarchy of knowledge evolved which is reflected in contemporary secondary education. Thinkers use their intelligence; artisans use tools. Hargreaves has described how this hierarchy of knowledge plays out in the marginalization of music, visual arts, drama, technical subjects, and business subjects in secondary schools (Hargreaves, Fullan, Wignall, Stager, & Macmillan, 1992).

Perhaps more insidious for many students is the decontextualized nature of much of what they are expected to learn. Getting the correct answer is more important than understanding the concepts behind the problem. Gardner suggests that students who learn at a surface level rarely gain the real understanding which comes through contextualized learning.

> … the findings of cognitive research over the past 20–30 years are really quite compelling: students do not *understand* in the most basic sense of that term. That is, they lack the capacity to take knowledge learned in one setting and apply it appropriately in a different setting. (in Brandt, 1993, p. 4)

The traditional school paradigm, therefore, came to mean the imparting of "approved" knowledge through government guidelines, state-authorized textbooks, and standardized tests. Students were sorted according to ability to create more homogeneous groups. Special education legislation in many countries further exacerbated this sorting by creating new categories.

Supported by detailed legislation, schools spent as much time ensuring compliance as they did attending to students. The evidence (Hargreaves & Earl, 1990; Oakes, 1985) indicates that this sorting process, which has its roots in the early part of the century, still divides students, not by intelligence but by socio-economic class, race, and ethnic background. Classes for students identified as gifted tend to come from higher socio-economic groups. In one large school board in Ontario, the assessed value of homes of students in gifted classes range from 8 to 15 percent higher than the average for the region, depending on the area. Students in vocational schools, in disproportionate numbers, tend to come from lower socio-economic groups and racial and ethnic minorities.

Perhaps more insidious for many students is the decontextualized nature of much of what they are expected to learn.

Teachers within this paradigm have come to be quasi-professionals or, less charitably, semi-skilled trades people. Since students are the inputs in the educative process, then the teacher's job is to mold them in accordance with the specifications (courses, hours, texts, tests) designed by educational experts to achieve the proper outputs which are measured by test scores. The proof of teacher and school effectiveness to many is computed in reading and mathematics scores on decontextualized tests.

If one assumes that students can be grouped homogeneously and dealt with in standardized ways, then one can externally prescribe the approach to teaching and the teacher's job is to do, not to think. In other words, external agents attempt to deprofessionalize teaching by removing decision making. Staff development is not important in this model. In-service for teachers is needed to ensure understanding of the "way" to teach different groups of students. Supervision of teachers, therefore, becomes investigation to ensure compliance with external requirements.

This paradigm for education has worked well for many years. The evidence is fairly clear that our best students have done very well (Bracey 1991, 1992, 1993). In fact, one might argue that we are prisoners of success. As the former President of Harvard Charles William Elliot once commented, "A good past is positively dangerous if it makes us content with the present and so unprepared for the future."

Our society has been able to absorb young people with differentiated educational backgrounds. Industry required people with basic math and reading abilities who could perform routine jobs; punctuality and compliance were also required qualities. Those who were unsuccessful in the traditional school paradigm found places in society and most enjoyed the benefits of developed economies. This paradigm worked in 1965 but it is not working in 1995 and will not work in 2005. The postmodern world requires a different model of schooling which is more in concert with the changing nature of economies and social structures.

The Emerging Learning Paradigm

A new paradigm of learning is emerging:

> The capacity for thoughtfulness is widespread, rather than the exclusive property of those who rank high, and our views of students are susceptible to change. Not only may students' capacities leapfrog our predictions but our cultural conceptions of skill and learning inevitably develop (or at least change)…. learning at all levels involves sustained performances of thought and collaborative interactions of multiple minds and tools as much as individual possession of information. (Wolf, Bixby, Glenn, & Gardner, 1991, p. 49).

According to Gardner, there are multiple intelligences (Gardner, 1982). People are more proficient in some areas than others. In addition to logical-mathematical intelligence, he describes linguistic intelligence, musical intelligence, spatial intelligence, kinesthetic intelligence, and two kinds of personal intelligences — intra- and interpersonal. This is a much more democratic and inclusive concept of learning and intelligence. The challenge is not one of sorting the fit and the less fit but rather developing all these "minds."

Research on learning indicates that ability is not fixed and learning is not sequential. Students' ability can be modified by effective instruction. Learning is far more effective within a context (Berryman, & Bailey, 1992). The popularity of co-operative education and work experience reflects this notion.

The new guidelines adopted by the National Council of Mathematics Teachers are based on the premise that "knowing mathematics is doing mathematics and what students learn depends to a great degree on how they learn it. The emphasis ... is on solving nonroutine problems in meaningful contexts" (Smith, Smith, & Romberg, 1993, p. 4).

In addition to conventional basics, there are new basics appropriate to a changing world. Reich (1992) contends that people who will succeed in a postmodern world possess the following four sets of basic skills:

- abstraction — the capacity to discover patterns of meaning
- systems thinking — the capacity to see relationships among phenomena
- experimentation — the ability to find one's own way through continuous learning
- the social skills to collaborate with others

If one compares the processes and products of the new learning paradigm with the needs of a postmodern economy, the need for educational reform is compelling. Berryman and Bailey in their study of what they call the "double helix" — the needs of the new workplace and the imperatives of new approaches to learning — found that:

> Our new understanding of both work and learning suggests very similar directions for reform. Strengthening the educational system so that it conforms more to the way people learn will also directly enhance the system to prepare students for the types of workplaces that are emerging in factories and offices throughout the country. (p. 44)

The Conference Board of Canada in its outline of employability skills corroborates Berryman and Bailey's findings in its list of required academic skills (Corporate Council on Education, 1992). The Conference Board expands the conventional basics to include critical thinking, problem solving, and technological literacy. The list also outlines personal-management skills like positive attitude, responsibility, and adaptability. It adds a set of teamwork skills which include the ability to contribute to organizational goals and to work within a significantly broader span of control. A cursory analysis of present educational practices suggests that schools are out of step with the needs of the larger society of the 1990s.

While congruent with changing employability needs, what is particularly appealing about this new paradigm is its compatibility with the needs of individuals to develop as fully functioning human beings. This model of learning will flourish in schools which reflect the conviction that:

A cursory analysis of present educational practices suggests that schools are out of step with the needs of the larger society of the 1990s.

> a democratic society is ethically committed to seeing all people as able, valuable and responsible; to valuing cooperation and collaboration; to viewing process as product in the making; and to developing the untapped possibilities in all worthwhile areas of human endeavour. (Purkey & Collins, 1993, p. 8)

What is emerging, therefore, is a much clearer sense of purpose which not only addresses the cognitive imperatives necessary for all students to function in the postmodern environment but also focusses sharply on the "vital sources" of students' humanity.

What are the implications of this emerging paradigm in practice? When this question was posed to educators in eleven different countries, a consensus emerged on the following features:

- curriculum should be defined in terms of learning outcomes and should be more holistic and less subject based
- learning should be defined by the achievement of outcomes rather than the time spent in a classroom
- learning outcomes must be relevant and promote contextualized learning
- assessment of student performance should be integrated into the instructional process and based more on performance of real-life tasks (Stiggins, 1991)
- students should be grouped in a variety of ways, not just by presumed ability or disability
- technology must be an integrated part of teaching and learning
- organization of schools should be characterized by greater flexibility
- teachers should function as professionals and be encouraged by leaders who create a learning community
- there should be system and school-wide commitment to professional growth
- schools should work with a "top down–bottom up" network
- schools and school systems should work closely with the local community to develop school policies
- school governance must move responsibility and accountability closer to the school itself

Conclusion

These are but a few of the significant changes in schools which will be necessary to prepare our students for the postmodern world. If some or all of these are necessary to facilitate the emerging learning paradigm, the huge question becomes, How do we get from where we are now to where we want to be? Traditionally, school reform has focussed on one aspect or another of school change without looking at the school as a total system. It has ignored power relationships and, until recently, has failed to see schools as distinctive cultures. Fullan captures this idea when he says:

> Our attention in policy, practice and research has shifted in recent years away from preoccupation with single innovations toward more basic, integrative and systematic reform. Changes in the culture of schools, in the roles and relationships of schools, districts, universities and states, and in integrating teacher development, school improvement, leadership and curriculum toward more engaging learning experiences for students and teachers dominate the current scene and will continue to do so for the rest of the decade. (1990, p. 137)

The implementation of a common core curriculum, therefore, fits within the context of an international trend towards total school renewal designed to reposition education to meet new and changing societal pressures. Unfortunately, in many countries, states, and provinces, "reformers" have seemed more concerned with propping up the traditional approach to learning rather than embracing the new paradigm. Ontario is rather late on the "common curriculum scene" and has the chance to learn from the successes and failures of others. The common core curriculum, therefore, must reflect the new learning paradigm with its emphasis on both quality and equity. It must also be sufficiently flexible to continue to provide expression for teacher and student creativity, imagination, and humanity. Above all, it must be based on a broadly democratic notion of educational purpose. One can only hope that those charged with implementing the recommendations of the Royal Commission on Learning listened carefully and well. We don't need more "good schools if this were 1965."

REFERENCES

Barker, J. (1989). *Discovering the future: The business of paradigms*. St. Paul, MN: ILI Press.

Berryman, S. E., & Bailey, T. R. (1992). *The double helix of education and the economy*. New York: Teachers College Press.

Bracey, G. W. (1991). Why can't they be like we were? *Phi Delta Kappan*, **73**(2).

Bracey, G. W. (1992). The second Bracey report on the condition of public education. *Phi Delta Kappan*, **74**(3).

Bracey, G. W. (1992). The third Bracey report on the condition of public education. *Phi Delta Kappan*, **75**(2).

Brandt, R., (1993). On teaching for understanding: A conversation with Howard Gardner. *Educational Leadership*, **50**(7), 4–7.

Corporate Council on Education. (1992). *Employability skills profile*. Ottawa: Conference Board of Canada.

Drucker, P. (1993). *Post capitalist society*. New York: Harper Business.

Fullan, M. G. (1990). Beyond Implementation. *Curriculum Implementation*, **20**(2), 137–139.

Gardner, H. (1982). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.

Giroux, H. (1992). Educational leadership and the crisis of democratic government. *Educational Researcher*, **21**(4).

Goodlad, J. (1984). *A place called school*. Toronto: McGraw Hill.

Hargreaves, A., & Earl, L. (1990). *Rights of passage: A review of selected research and literature on innovative school organization for the delivery of programs and srvices for students aged 11–14 years*. Toronto: Ontario Ministry of Education/Ontario Institute for Studies in Education.

Hargreaves, A., Fullan, M., Wignall, R., Stager, M., & Macmillan, R. (1992). *Secondary school work cultures and educational change*. Toronto: Ministry of Education.

Hargreaves, A. (1994). *Changing teachers, changing times*. London: Cassell.

Harvey, D. (1989). *The condition of post modernity*. Oxford: Basil Blackwell.

Hodgkinson, H. (1991). Reform versus reality. *Phi Delta Kappan*, **73**(1).

Oakes, J. (1985). *Keeping track: How schools structure social inequality*. New Haven: Yale University Press.

Purkey, W. W., & Novack, J. (1984). *Inviting school success* (2nd ed.). Belmont, CA: Wadsworth.

Purkey, W. W., & Collins, E. L. (1992). The coming revolution in American education. *Quality Outcomes Driven Education*, **1**(1), 7–11.

Reich. (1991). *Work of nations*. New York: Vintage Press.

Smith, S. Z., Smith, M. E., & Romberg, T. A. (1993). What the NCTM standards look like in one classroom. *Educational Leadership*, **50**(8).

Stiggins, R. M. (1991). Assessment literacy. *Phi Delta Kappan*, **72**(7) 534–539.

Terman, L. M. (1922). *Intelligence Tests And School Reorganizations*. Yonkers-on Hudson, NY: World Book Company.

White, J. (1991). *Education and the good life: Autonomy, altruism, and the national curriculum*. New York: Teachers College Press.

Wolf, D., Bixby, J., Glenn, J., Gardner, H. (1991). To use their minds well: Investigating new forms of student assessment. *Review of Research in Education*, 17.

Giving Voice to the Practising Professional

How Students Learn

JEAN HEWITT

Superintendent of Schools, Board of Education for the City of London
Presently Coordinator, Violence-Free Schools, Ontario Ministry of Education and Training

In many educational systems around the world, the past decade has seen a strong move towards a more precise delineation of what students must accomplish during their period of formal schooling. The National Curriculum in Britain, Outcome-Based Education in the United States, Manitoba's New Directions, and our own provincial Common Curriculum are examples of responses to a public and political desire for what might be called "results-oriented" learning. In these examples, we see a number of common features:

- each identifies broad "essential" cross-curricular learnings
- each sets out specific learning expectations as targets or developmental markers to be achieved by the end of identified periods or grades
- each lists common expectations for all students from the first year of school until mid-adolescence
- each abandons the subject or topic focus found in traditional curriculum documents in favour of measurable and observable statements of achievement which include more generic knowledge, skills, and values
- each identifies a number of new "basics," such as technological literacy and the ability to work collaboratively, while both restating and broadening the traditional basics of literacy and numeracy

In short, modern curricula, in comparison with those produced in the sixties and seventies, move the emphasis within the classroom context from what the teacher *does* to what the student *learns*.

The redesigning and refocussing of curriculum using an "outcomes" framework has not been without controversy. In a way not possible before the advent of modern information-technology, citizens have voiced opinions about educational reform. They have challenged government direction and, in doing so, have affected both the shape and the substance of the documents which we now see in print. The Ontario Common Curriculum has been taken apart and reassembled during the political consultation process. It has been pushed by the economic realities expressed by the Conference Board of Canada and numerous business and labour groups. It has been pulled by the social realities expressed by special-interest coalitions and grass-roots lobbyists. The influence of these public and political voices can be seen in the image of the graduating learner and the stated principles underpinning the final document.

In the lengthy public dialogue on the merits or failings of Ontario's Common Curriculum, an important voice has been absent all too frequently. I refer here to the professional voice — the voice of those who have worked with young people for many years and have gained a wealth of knowledge, both from their systematic classroom observation as well as from thoughtful analysis of the current research on learning. It is important to recognize this unique perspective. It is also important to distance it from the often loud, reactionary voices of those within the "profession" who have, with little analysis, railed against the Common Curriculum and, indeed, against educational reform generally, arguing that it is all "faddish," political, or ill-conceived. It is unfortunate that these strident voices, albeit a minority, have kept discussion within the teaching ranks largely at an emotional and superficial level, drowning out the opinions of more thoughtful colleagues.

In this article, I seek to give voice to the practising professional. From this perspective, I raise the most important and fundamental question which should be asked about the Common Curriculum. "Is it consistent with current knowledge about how students learn and the nature of intelligence itself?"

It is obvious that the question I pose has great scope. It is not possible in this context to do justice to the voluminous research on human learning and potential nor to adequately analyse this research in relation to the curriculum outline under discussion. However, I will consider six points at which the *The Common Curriculum* departs from traditional curriculum documents or courses of study. These points are:

- high expectations for all students
- acknowledgment of the variation in human intelligence and learning styles
- recognition of broader developmental stages
- integration of academic subjects
- emphasis on prior knowledge and experience
- awareness of the context of learning

I will examine these "points of departure" in the light of my own 30 years of classroom experience and my understanding of current information on the process of learning and the nature of intelligence.

Expectations

The Common Curriculum, both structurally and philosophically, supports the raising of expectations in regard to student achievement. In setting out common learning outcomes for all students from kindergarten to Grade 9, the province not only destreamed Grade 9 but, more significantly, placed students who in the past would have been working on a "special education" curriculum back onto the same agenda as their peers. This raising of standards is reinforced by comments within *The Common Curriculum* that "all students can learn" and by an increased focus on higher-order thinking skills and problem-solving in the early grades.

> Modern curricula, in comparison with those produced in the sixties and seventies, move the emphasis within the classroom context from what the teacher *does* to what the student *learns*.

For the past 50 years curriculum documents, using labels such as "vocational," "academic," "special education," and "gifted," have reinforced the notion that the capacity for high levels of thinking and intellectual achievement is to be found only in a quarter to third of the school population. Since the twenties, when psychologists such as Terman, popularized IQ tests and reinforced the idea that intellectual potential was fixed and could actually be measured with pencil-and-paper testing, students have been sorted to reflect a "normal distribution" curve and then provided with a set of curriculum expectations considered to be appropriate to their perceived potential. As Jeannie Oakes wrote in *Educational Leadership*:

> There is a persistent misunderstanding of the idea of the normal curve. It is not viewed as a statistical artifact that attempts to portray the distribution of certain characteristics of a population; it is seen as an accurate representation of how well kids are likely to do in school. (1992)

Modern research, aided by technology, has revealed that the capacity to think and achieve actually increases as the mind is challenged and developed. Thus, while time may be a variable in achievement, every student has the capacity to become more intelligent and should be given the opportunity to master those learning outcomes which lead to excellence. My experience in special education classes supports this position. Students labelled "slow" or "learning disabled," placed in a special program with greatly reduced expectations, move further away from the mainstream. In contrast, when they are challenged alongside "regular" students, they achieve at a much higher level. In setting higher, universal expectations for all students, *The Common Curriculum* is consistent with current research.

Varied Intelligences and Learning Styles

In *The Common Curriculum*, references to student individuality abound. The specific learning outcomes — particularly in Personal and Social Studies, and the Arts — refer frequently to individual differences and ways of thinking. In addition, the Principles of Learning and Principles of Teaching include statements such as, "Each student is a unique individual who has his or her own particular ways of learning" (p. 17) and "Teachers must use a variety of methods to meet the different learning needs of students" (p. 18).

This recognition that expressions of human intelligence are diverse and that learners process information in different ways has been slow to gain a foothold in curriculum documents. While references to the importance of the "needs" of the student within the classroom context have appeared in statements of educational philosophy for a long time, this has seldom translated into a curriculum which requires that instructional and assessment strategies vary in any significant way to accommodate these needs.

The matching of instructional strategies to the specific competencies of the student is a fundamental skill of the professional teacher and yet Anthony Gregorc, a prominent researcher in learning theory, noted in 1985:

> It causes me to pause and reflect upon how haphazard, naive, and selfish some educators are in their selection of instructional means, methods, and environmental conditions. (cited in Huff, Snider, & Stephenson, 1986)

The work of researchers on learning styles, such as Gregorc, and the work of Howard Gardner on multiple intelligences point to two key elements which must be incorporated into modern curriculum if increasing numbers of students are to reach increasing levels of excellence. One is the nurturance of other expressions of intelligence in addition to those traditionally valued in the school setting. The other is the deliberate selection of instructional strategies which accommodate students who process information more easily through the manipulation of concrete materials, charts, or pictures, who need more time to process, or who benefit from changes to other aspects of the learning environment. All teachers have known students who failed dismally in the classroom setting while demonstrating great competency on the farm or in the community. Too often, these students dropped out of the academic world early, convinced that they had no talent for "book learning." We can no longer afford such wastage. In requiring teachers to address varied learning styles and expressions of intelligence, *The Common Curriculum* is consistent with current research.

Developmental Stages

The Common Curriculum sets attainment goals by division, stating that "by the end of Grade 3, a student will be able to ..." This grouping of learning outcomes into broader developmental units, as opposed to traditional grades, moves us a step closer to the concept of continuous progress.

Traditional forms of curriculum, in spite of forward-looking reports such as *Living and Learning*, have been locked for too long into narrow grade "boxes" which do not reflect the path of ups, downs, and plateaus along which young learners travel. Developmental psychology has clearly shown that, at any given age, children will vary widely in their competence when compared to peers. Indeed, intellectual and social competence and skill acquisition vary as much as height and weight in the students found within each grade. If teachers within the primary, junior, and intermediate divisions work as teams and/or form multi-age groupings of students, classroom experiences may begin to more accurately reflect the natural flow of learning, and the emphasis will shift from group competence to individual competence. In discussing "stage/environment fit," Jacquelynn Eccles (1993) writes: "optimal development takes place where there is a good stage-environment fit between developing individuals and the learning opportunities afforded them in their social environment."

The Common Curriculum, in setting divisional markers and opening up the learning process to allow it to flow more naturally, is again consistent with current research.

Integration

When *The Common Curriculum* is placed beside earlier documents such as the *1955 Ontario Curriculum*, the degree of integration found in the new document is readily apparent and its format looks quite distinctive. Traditional curriculum manuals incorporated lists of topics to be covered, grouped by narrow subject-headings. In contrast, *The Common Curriculum*, using the Essential Learnings as a framework, is a tapestry of knowledge, skills, and values. The outcomes within it are linked loosely by four threads — the Arts; Language; Mathematics, Science, and Technology; and Personal and Social Sciences. Many of the specific skills are generic and are reinforced across these threads and across grade divisions. *The Common Curriculum* recognizes the importance of "making connections (p. 17) and, in the fourth Essential Learning, it speaks directly to the importance of "systems thinking" in the modern, complex world (p. 27).

> In requiring teachers to address varied learning styles and expressions of intelligence, *The Common Curriculum* is consistent with current research.

Current knowledge about the mind and learning reveals a number of interesting things. We find that the majority of learners under the age of 16 operate largely at a "concrete" stage. This means, among other

ORBIT

THEME ISSUES
FOR 1994
only $9.75 each (GST incl.)
Bulk Rates Available

ORBIT
The Changing Role of the Teacher
ORBIT
SAFE SCHOOLS
A Special Report of the Task Force
ORBIT
ANTI-RACIST EDUCATION
Working Across Differences
ORBIT
Primary Education
The Child, the Classroom, and the Curriculum

Mail Cheque or Money Order to:

ORBIT
P.O. Box 10 Station F
Toronto, ON M4Y 2L4

Phone: (416) 696-2295
Fax: (416) 696-2263

things, that they have difficulty generalizing what they have learned in one setting to a different setting. Concepts need to be reinforced in different ways and from different perspectives if learning is to be consolidated. Part-to-whole instruction works well only when the learners already have a grasp of the context into which the pieces fit. "Real life" problems require a "systems" way of thinking, and the mind must actually make sense of the whole before it can understand the parts. Leslie Hart, in his book *Human Brain, Human Learning*, refers to the brain as a "subtle sensitive pattern making apparatus" and to learning as "the extraction of patterns from confusion" (p. 51). Edward Clark (1988) described traditional education in the following way:

Real life problems require a *systems* way of thinking, and the mind must actually make sense of the whole before it can understand the parts.

> Getting an education is like putting together an ever-expanding jigsaw puzzle. Students spend years memorizing the shapes, colours and sizes of as many pieces as possible. They learn to collect and sort the pieces into appropriate files, each of which has a label — math, science, history, art. Occasionally they may fit a few pieces together. However, because they seldom receive more than a few hints as to what the puzzle is all about, they have no ... reference for understanding how the individual pieces fit together.

The Common Curriculum, in reinforcing the interrelatedness of ideas and attempting to integrate knowledge to enhance understanding, reflects the findings of current research.

Prior Knowledge

The "empty vessel" image of the young mind is evident throughout traditional curriculum documents; it is usually coupled with an emphasis on "teacher talk" or "teacher- directed" methodology. The learner is expected to be passive, and the knowledge which he or she brings to the classroom irrelevant. *The Common Curriculum* rests on a different set of beliefs, referring in many places to the importance of the learner's prior knowledge and experiences, emphasizing that each student brings a unique knowledge base to the classroom. It refers to learning as "an active process that involves constant search for meaning" (p. 17).

The idea that in order to increase levels of achievement, new knowledge, skills, and values must build on (or challenge) what is already in place is referred to frequently in current literature on the learning process.

As L. Resnick writes in *Education and Learning to Think*:

> Recent cognitive research on learning and constructivist views of knowledge indicate that students truly learn only when they are afforded the opportunity to actively incorporate what they are studying in their own experiences, concepts, and understandings of how the world works. (p. 29)

As we attempt to increase achievement for all students, it is essential to recognize that if what the students already know is not addressed, they will not take ownership of classroom learning or they will undervalue their own competence and become teacher-dependent. If what the students do not know is not addressed, they will be frustrated and will accumulate learning deficits which will prevent them from proceeding further.

Teachers who take time to find out what their students bring to the classroom, and then adjust the experiences they provide in order to fill gaps or expand existing knowledge, see steady academic gains even in those described by others as "unmotivated." In recognizing that curriculum must begin with the individual learner and must address the existing knowledge base of that learner, *The Common Curriculum* is consistent with current research.

The Context of Learning

The Common Curriculum makes numerous references to the family, immediate neighbourhood, and the global community as the "context" of learning. In doing so, this document attempts to break down the barriers between in-school and outside-school experiences, saying "students must see the relevance of what they are learning" (p. 17) and "teaching must occur in contexts which link school work to everyday life" (p. 19). Traditional curriculum documents, by the inclusion of field trips and optional units, made some effort to increase the relevance of what was learned in school. All too often, however, the larger context of learning was ignored.

Today, technology has brought the larger world into the homes of the students; their minds are full of these vivid images and thoughts as they enter the classroom. Much of the literature on learning confirms that if the global context in which they learn is not addressed, students will see schooling as irrelevant and will be unable to think in a holistic way. Teachers will also miss the opportunity to help students think critically about and analyse the images and ideas which bombard them in their "real" world. Higher levels of student achievement appear to be closely linked to their ability to interpret experiences outside the classroom in the light of constructs of learning to which they are exposed within the classroom. In that it emphasizes the importance of contextual learning and authentic assessment, *The Common Curriculum* is consistent with current research.

Conclusion

Over the coming months, teachers will be wrestling with the implementation of *The Common Curriculum.* It is a challenging task. Many previously held beliefs and well-used practices may have to be put aside. The document will grow and change over time. The number of specific learning outcomes contained in it may prove to be unwieldy, some will be revised or refined. However, I believe that the principles upon which the new curriculum is built are sound; they reflect the most current information about intelligence and learning. In this respect, they set the foundation upon which we can develop a school system which advances achievement for all.

REFERENCES

Clark, E. (1988, March). Making sense of learning. *Phi Delta Kappan*, p. 17.

Eccles, J., et al. (1993, February). Development during adolescence. *American Psychologist*, p. 36.

Hart, L. (1983). *Human brain, human learning.* New York: Longmans.

Huff, P., Snider, R., & Stephenson, S. (1986). *Teaching and learning styles: Celebrating differences*. Toronto: OSSTF.

Oakes, J. (1992, October). On tracking and individual differences. *Educational Leadership*, p. 34.

Resnick, L. (1987). *Education and learning to think.* Washington: National Academy Press.

Ontario's Common Curriculum

A Move to Outcomes-Based Learning and Integrated Programming

JUDY COGHILL

Education Officer, Member of The Common Curriculum Co-ordinating Team, Ontario Ministry of Education and Training

The move to outcomes-based learning and integrated programming that *The Common Curriculum, Policies and Outcomes, Grades 1–9*, 1995 describes is neither new nor sudden. Over the last 15 years, Ontario reports have been planting the seeds for these changes.

> In Ontario, the idea of an unstreamed, common school experience to school-leaving age came to public notice in 1980 when it was suggested in submissions to *Ontario's Secondary Education Review Project* (Ontario Premier's Council Report, p. 38).

In 1986, *The Report of the Ontario Youth Commissioner* described the need for all students to be successful and that this could be accomplished through a "results oriented" system (Dryden, p. 17).

In 1987, the *Ontario Study of the Relevance of Education and the Issue of Dropouts* described a need for curriculum focussed not on objectives, but on outcomes described in terms of demonstrable skills and knowledge that would be achieved by all students through varying means (Radwanski, p. 37). In 1988, *The Report of the Select Committee on Education* foresaw decreased emphasis on time and grades as the organizers of schooling. Rather students would move through broader divisions of learning at flexible rates (p. 13). Thus student progress would not have to be limited to what was learned or not learned in one year. Many of the ideas of the 1990 Premier's Council Report, *People and Skills in the New Global Economy*, are present in *Policies and Outcomes, Grades 1–9*. These recommended changes include: a common destreamed curriculum, provincial standards and reviews, a curriculum focus on problem-solving, the application of skills and knowledge in complex and real-world contexts, and the importance of technology in all areas of the curriculum.

In this article, I intend to provide some of the history and background thinking that are the basis for *Policies and Outcomes, Grades 1–9* (1995), particularly in relation to outcomes-based learning and integrated curriculum. It is my hope that this information may be useful to those involved in implementing the Common Curriculum at the classroom, school, and board levels.

Outcomes-Based Learning

As early as the 1970s, the word "outcome" was being used to mean "goal, purpose, and end" (King & Evans, 1991, p. 73). Versions of outcomes-based learning have been developed in New Zealand, Australia, Wales, England, and in various parts of the United States and Canada. In each case, the system of outcomes developed reflects the needs and contexts of the country or jurisdiction.

Ontario's common curriculum reflects the educational, economic, and social climate of the 1990s in Ontario. The document describes what is common (or shared) for all students — the outcomes; and what is not common (or identical) — the learning experiences by which students achieve these outcomes. All students can and will achieve success, but there are many different forms that success can take. In order for all students to achieve success, it will be necessary to vary instructional and assessment strategies, resources used, amount of time needed, and location of learning for individual students and groups of students.

Outcomes stated in *Policies and Outcomes, Grades 1–9 in* outcomes provide clearly stated results of learning by which students can be assessed according to standards and performance criteria. Outcomes and standards are defined at key stages of schooling, Grades 3, 6, and 9. This sequencing is important to provide development and reinforcement for the outcomes throughout the student's learning experiences in Grades 1 to 9. Rather than treating learning as a series of hurdles to be got over and, once mastered successfully, never repeated, outcomes-based learning builds on skills, knowledge, and values developed and reinforced in a variety of learning experiences throughout the student's schooling.

An outcomes-based learning system does not simply mean that the learning is based on outcomes. It means that for each outcome, students will have multiple and different learning experiences in each of the three years in which the student is working towards the achievement, and the improved achievement, of that outcome. In succeeding years, the student must continue to use and build on achieved outcomes in new learning situations. Coverage of an outcome is not enough. Because no outcome or set of outcomes is owned by any specific program area, it is possible to group outcomes in a variety of ways that enable diverse learning experiences.

Schooling is about enabling every student to reach and demonstrate his or her potential. A system based on objectives generally allows students one significant opportunity (often a test or essay or project) to demonstrate their level of achievement in relation to a particular objective. In an outcomes system, students can demonstrate their learning in relation to a particular outcome in many different ways over several grades. Measurement of student achievement of outcomes is criterion-referenced, rather than norm-referenced; that is, student achievement is based on the individual's development according to a standard or fixed set of criteria, rather than being based on the abilities and speeds at which others learn.

Outcomes provide a clear vehicle for communication between teacher and student, teacher and parents, teacher and principal. Teachers know what the students must learn and collect the evidence to demonstrate that learning; students know what they must achieve, at what point they are in their progress towards achievement of the defined outcomes, and, through conferences with the teacher and reflection on their own learning, come to understand what they must do in order to improve their progress towards those outcomes. This does not mean that every student will reach the highest level of the standard in relation to the outcome, but rather each student will be able to demonstrate her or his best achievement over a period of time.

Outcomes-Based Learning and Integrated Programming

Integrated programming assists students in achieving outcomes. Curriculum integration allows for the personalizing of curriculum to a much greater extent.

In *Policies and Outcomes, Grades 1–9*, the essential learning outcomes are now described in terms of skills and abilities, not subject content as in the previous versions of the document. This means that specific learning outcomes from all program areas are related to the same ten essential learnings. To help teachers in making connections for planning and teaching integrated programs, an appendix to *Policies and Outcomes, Grades 1–9*, lists the essential learnings and the specific learning outcomes to which they are connected.

All outcomes are the responsibility of all teachers; however, for the sake of organizing the document, outcomes have been placed in the program area(s) where they are more traditionally expected to be found. Although some outcomes contain building-block skills of particular subjects, the outcomes are never defined so specifically as to limit their demonstration to any one subject discipline or program area. In fact, content is the vehicle for achievement of the outcomes. The purpose of learning is not only the development of knowledge but also application of knowledge in practical and personally meaningful contexts.

Because learning focusses on the balanced achievement of outcomes from all four program areas in each year of the student's schooling, programming must enable students to have several experiences with the same outcomes in order to increase their level of learning and achievement.

Although the numbers of outcomes have been reduced and sequenced, a single outcome will rarely become the focus of program planning.

The forms of integration described and exemplified in *Policies and Outcomes, Grades 1–9*, provide choices for teachers who will then need to consider some of the following questions in deciding on integration: Which outcomes do my students need to be addressing? Which is the most appropriate form of integration by which to accomplish those outcomes? What structures need to be put in place to facilitate the learning for my students?

The four forms of integration in *Policies and Outcomes, Grades 1–9*, are arranged in increasing levels of complexity and sophistication. The first type of integration — parallel content — is an introductory form designed particularly for teachers who have not previously considered integration. The other forms of integration refer to content connections among related subjects, concept connections among program areas, and cross-curricular connections which exist beyond subject or program areas and involve students actively in a negotiated curriculum. This hierarchy does not mean that all teachers and students should be working at the level of cross-curricular connections all of the time. It does mean that teachers will develop comfort and experience working with all of the last three forms of integration, incorporate them into their teaching and curriculum-writing repertoire, and be able to articulate the reasons for selection of a form for a particular purpose and for the specific needs of a particular group of students.

> Because no outcome or set of outcomes is owned by any specific program area, it is possible to group outcomes in a variety of ways that enable diverse learning experiences.

Support for a range of approaches to integration is a common one. A range of approaches to integration can be found in Heidi Hayes Jacobs (1989) *Interdisciplinary Curriculum: Design and Implementation*, Jack Miller, Bruce Cassie, and Susan Drake's (1990) *Holistic Learning: A Teacher's Guide to Integrated Studies*, and Susan Drake's (1993) *Planning Integrated Curriculum: The Call to Adventure*. These books also include ideas about how to plan integrated units of study. A Ministry Transition Years resource guide, *Towards an Integrated Curriculum* (1993), provides a practical model for schools to develop integrated programming.

Teachers need to become familiar with a range of methods in order to suit their students' needs in achieving the outcomes. Judy Carr and Chris Stevenson's (1993) *Integrated Studies in the Middle Grades: Dancing Through Walls*, an edited collection of teachers' stories of integrated units as experienced in their classrooms, provides highly readable and useful examples of content and the concept connection types of integration. James Beane's (1990) *A Middle School Curriculum: From Rhetoric to Reality* provides a coherent and thoughtful understanding of the cross-curricular form of integration, as well as providing practical samples. A popular resource in many Ontario schools, Robin Fogarty's (1991) *The Mindful School: How to Integrate the Curriculum* provides ten models of integration. These different models are also arranged in increasing order of sophistication and can be related to the higher three forms of integration. What should always be kept in mind is that although *Policies and Outcomes, Grades 1–9*, defines three forms of integration, there are many ways of achieving each of these forms of integration.

We continue to learn more about how people learn. We know that, for example, the visual/spatial or kinesthetic learners in Howard Gardner's theory of seven intelligences have not always had their abilities and talents recognized in the traditional school setting. For these students, and many others with dominant intelligences other than linguistic, school has been a difficult place in which to experience success. The work of Howard Gardner provides the foundational thinking in this area, specifically in *Frames of Mind* (1983) and his more recent book, *Multiple Intelligences: The Theory in Practice* (1993). Thomas Armstrong's (1994) *Multiple Intelligences in the Classroom* provides a very practical and readable teacher introduction to multiple intelligences. Armstrong contends that learning styles reflect intelligences in operation (p. 13). The work of Bernice McCarthy and her 4MAT model of program, which both reflects and addresses the needs of the four different styles of learners, has been very useful to teachers in personalizing programs for specific students or groups of students (McCarthy, 1980; McCarthy & Leflar, 1983; Morris & McCarthy, 1983).

The four program areas of *Policies and Outcomes, Grades 1–9* thus emphasize a balance in reflecting the interests and abilities of students and a balance in the achievement of varied skills and knowledge that will benefit them in their lives. There has been a history, represented by organizational practices, of creating core and, and as a result, non-core subjects. This practice awards some subjects or areas higher status. In *Policies and Outcomes, Grades 1–9*, the skills, knowledge, and values of all four program areas are essential and can be integrated.

The Arts provide unique means for personal expression and of social interaction, both of which are important to young students. Recognizing one's own talents, appreciating the aesthetics of daily life, and participating in one's own culture are essential aspects of life-long learning.

Language outcomes are incorporated into one program area. Second-language teaching has developed from more traditional grammar approaches to employing methods similar to those used in language arts classes. Thus language teachers, whether teachers of the language of instruction, ESL/D, or international languages, can work together to reinforce skills, knowledge and values related to reading, writing, speaking and listening, viewing and representing, and learning, regardless of the language being taught. In addition to learning about language, language is also the means of all other learning and so is necessarily a significant part of all program areas.

Mathematics, Science, and Technology embody a coherent program area with considerable application of skills and related concept and content connections. The unity of this area in the previous versions has been strengthened by the inclusion of additional specific examples for each of the specific learning outcomes.

Personal and Social Studies: Self and Society, is now a coherent single program area, not simply a collection of many subjects. Students in Grades 1 to 9 need an integrated way of learning about themselves as individuals and as members of a society. The outcomes in each aspect of this section in *Policies and Outcomes, Grades 1–9* have attempted to mirror this by focussing initially on personal studies and then moving out to social studies.

What is essential is that programs be organized to facilitate student integration and student application of learning towards the successful achievement of the outcomes.

Implications for Teaching and Assessing

The outcomes provide "the what" — that is, what students will achieve and for what teachers and students are responsible and accountable. Subject guidelines, previous units of study, and resource documents provide "the how." There is no formula by which to accomplish the planning, development, teaching, and assessing of this curriculum. The successful matching of outcomes, materials, and instructional and assessment strategies for particular students challenges the professional knowledge and art of the teacher. Some questions for educators to consider might include: What kind of a class, grade, or school structure would allow us to insert re-teaching loops for some students when they need it? What would my program look like if the norm were independent study and what structures would need to be altered for the students? If assessment is diagnosing and responding to student needs related to outcomes, how will it alter what I do?

This new curriculum is complex and challenging; it cannot be accomplished alone. It will only happen if teachers work with their colleagues and communicate clearly and regularly with students and parents.

REFERENCES AND SUGGESTED READING

Relevant Ontario Reports

Dryden, K. (1986). *Report of the Ontario Youth Commissioner*. Toronto: Queen's Printer.

Ontario Legislative Assembly. (1988). *First report of the Select Committee on Education*. Toronto: Queen's Printer.

Ontario Premier's Council Report. (1990). *People and skills in the new global economy*. Toronto: Queen's Printer.

Radwanski, G. (1987). *Ontario study of the relevance of education and the issue of dropouts*. Toronto: Ministry of Education.

Integrated Learning

Beane, J. A. (1990). *A middle school curriculum: From rhetoric to reality*. Columbus, OH: National Middle School Association.

Drake, S. (1993). *Planning integrated curriculum: The call to adventure*. Alexandria, VA: Association for Supervision and Curriculum Development.

Fogarty, R. (1991). *The mindful school: How to integrate the curriculum*. Palatine, IL: Skylight Publishing.

Hayes-Jacobs, H. (1989). *Interdisciplinary curriculum: Design and implementation*. Alexandria, VA: Association for Supervision and Curriculum Development.

Miller, J. P., Cassie, J.R.B., & Drake, S. M. (1990). *Holistic learning: A teacher's guide to integrated studies*. Toronto: OISE Press.

Ontario Ministry of Education and Training. (1993). *Towards an integrated curriculum: A school resource guide*. Toronto: Ontario Ministry of Education and Training.

Stevenson, C., & Carr, J. F. (Eds.) (1993). *Integrated studies in the middle grades: Dancing through walls*. New York: Teachers College Press.

Multiple Intelligences and Learning Styles

Armstrong, T. (1994). *Multiple intelligences in the classroom*. Alexandria, VA: Association for Supervision and Curriculum Development.

Dunn, R. (March, 1989). *Survey of research on learning styles*. Educational Leadership.

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.

Gardner, H. (1993). *Multiple intelligences: The theory in practice*. New York: Basic Books.

McCarthy, B. (1980). *The 4MAT system: Teaching to learning styles with right/left mode techniques*. Barrington: IL: EXCEL.

McCarthy, B., & Leflar, S. (Eds.). (1983). *4MAT in action: Creative lessons for teaching and learning styles with right/left mode techniques*. Oak Brook, IL: EXCEL.

Morris, S., & McCarthy, B. (Eds.). (1983). *4MAT in action II: Sample lesson plans for use with the 4MAT system*. Barrington, IL: EXCEL.

Outcomes-Based Learning

The challenge of outcome-based education [Special issue]. (1994). *Educational Leadership*, **51**(6).

King, J. A., & Evans, K. M.(1991). Can we achieve outcome-based Education? *Educational Leadership*, **49**(2).

Russell. H. (Ed.) (1993). Standards, benchmarks, and Ontario curriculum: A special report on standards and accountability [Special issue]. *Orbit*, **24**(2).

Shipley, D. (1994). Learning outcomes: Another bandwagon or a strategic instrument of reform? *The College Quarterly*, **1**(4).

Stiggins, R. J. (1991). Assessment literacy. *Phi Delta Kappan*, **72**.

Wiggins, G. (1991). Standards, not standardization: Evoking quality student work. *Educational Leadership*, **48**(5).

SECTION 2

Preparing for Implementation

Setting Priorities at the Toronto Board of Education

Involving Parents in Curricular Decision-Making

GERRY CONNELLY

Curriculum Superintendent,
Toronto Board of Education

BENJAMIN D. LOWINSKY

Co-founder and Chair, Downtown Parents Council and Professor, Social Sciences and History Department, York University

Following the direction of the Ministry of Education and Training's Common Curriculum, a large-scale consultation aimed at involving parents in the development of a new curriculum was undertaken by the Toronto Board of Education. The purpose of the consultation process was to encourage ongoing dialogue among all those interested in the educational system. The result of the consultation is a set of system priorities that will result in a new curriculum and new accountability measures.

This article describes the project from the perspectives of the superintendent who co-ordinated it and a parent who was involved in the process.

An Educator's Perspective

A traditional model of curriculum development involves establishing teams of educators to write curriculum for a particular subject or program in a specific grade or division (elementary or secondary). Another approach, the one we elected to follow, begins with inviting all staff, students, parents, and members of the community to answer the question: What knowledge, skills, and values will prepare our students for life when they leave school?

Developing a process for constructive dialogue requires careful planning. We began in the conventional way, by establishing a committee composed of a broadly representative group. Over the course of several meetings, a plan evolved which was approved and shared with people across the system.

Our committee had four major tasks: obtaining commitment and support within the system, designing the process for the community meetings and follow-up of the results, developing a communication plan, and training facilitators. We also trained interpreters so that we could communicate with those members of our community who did not have facility in English.

Encouraging the involvement of students, school staff, and the wider community was our greatest challenge. We wanted to ensure that everyone had sufficient information and the opportunity to provide input. We developed a communication plan that included newsletters and notices in community papers in several languages. It also included meetings with all school administrators and parent groups, letters to student councils, post-secondary institutions, and employer groups who are involved in the co-operative education programs and other partnerships.

Knowledgeable facilitators were critical to this process. We provided a one-day training session for nearly 400 facilitators (mainly central and school staff and some parents) who volunteered to assist. The facilitator's role was to encourage a dialogue among the members of the small groups as well as provide a record of the results of the dialogue.

During the fall of 1993, hundreds of parents, students, staff, and members of the public spent a full Saturday or Sunday at one of three community meetings

> In general, parents and teachers wanted more system-level direction on content and results at each grade level in terms that are both measurable and clearly understood by teachers, parents, and students.
>
> —Gerry Connelly

held by the Toronto Board of Education. Others participated in school-based consultations. Together they considered the increasing demands our changing world is placing on the education system and how we should respond to these challenges. In particular, they discussed our focus question: What knowledge, skills and values will prepare our students for life when they leave school?

Input from these community meetings and written submissions were then compiled and analysed to identify recurring themes. After several stages of consolidation and review, we arrived at six graduation outcomes — statements of what students are expected to achieve through their experiences in our schools (discussed at the end of the article).

Once we had determined the graduation outcomes, we then asked the question: What are the implications for each subject and for each grade? For example, if "information management" is a general expectation, then we need to identify what we should be doing in each subject and in each grade to achieve this outcome.

In the second stage of the consultation, the responses obtained from the meetings were compiled in a *Consultation Guide* which was widely distributed. Once again, everyone was asked to comment. Over 2,600 people, individually and in groups (e.g., parent-school associations, school task forces, classes, and community-based organizations), responded through written comments and meetings.

What We Learned

Parents, teachers, students, staff, and the general public expressed the following expectations:

- strong basic skills and high standards should be emphasized in all program areas
- schools should provide a safe, secure, supportive environment for students and staff
- there should be a greater emphasis on measuring and communicating results

To be literate — that is, "knowledgeable and skilled in all areas of the curriculum" — is clearly regarded as the central focus of our education system. Some had concerns about the usefulness of identifying general expectations about what students should know, do, and value, that such expectations were too idealistic, vague, or unrealistic.

In general, parents and teachers wanted more system-level direction on content and results at each grade level in terms that are both measurable and clearly understood by teachers, parents, and students. They felt this greater specificity would help avoid unnecessary repetition or gaps in a student's education, make it easier for students to move from school to school, and treat students more equitably and consistently regardless of which school they attend.

Many were concerned that individual subjects, such as history and geography, might not get enough attention if expectations were stated in terms of the Ministry's four broad program areas as defined in the *Common Curriculum.* They preferred to have the curriculum organized by subject.

> The content and the parameters of the subject matter that are being taught our children have never been as important as they are today

At the same time, they wanted the curriculum to be more meaningful and relevant to students' personal experiences, everyday life, and to the world of work. They mentioned the importance of drawing connections among various subjects and dealing with issues such as equity, the environment, technology, and research skills. Many wanted core topics to be taught in all schools. At the same time, they wanted enough flexibility in the program to accommodate topics of interest to a particular student, class, or school community.

With respect to reporting on student progress, parents asked for a clear, honest assessment of their child's academic progress. When the child is having difficulties, parents said that they wanted to be informed about how the teacher plans to address the situation and what they as parents can do to help.

Students were also invited to comment on all aspects of the new approach to education. Two questions in the *Consultation Guide* were specifically directed to them:

> "How does what you learn in school help you in your life outside of school and prepare you for the future?"
>
> Many felt that school helps them learn to:
>
> - co-operate with others, develop social skills, respect the rights of other people, listen to what others say
> - prepare for future jobs and further education and earn more money

On the other hand, many said that what they learned in school was unhelpful, irrelevant, and too restricted in its perspective.

> "What changes would help you to learn better?"
>
> Students wanted courses to be directly related to their lives (e.g., personal rights and civil responsibilities, how to access the political system, how to use language and mathematics in real-life contexts). They wanted to learn how to express themselves, protect themselves from getting "ripped off," and be better prepared for jobs and careers. They also stressed the need to develop skills in problem solving, analysing information, evaluating choices, and using computers.

A Parent's Perspective

As a parent of two children attending schools of the Toronto Board of Education and as an educator myself, I have long had a deep interest in the curriculum of our schools. The content and the parameters of the subject matter that are being taught our children have never been as important as they are today, not only because of the extent to which our children's future is contingent upon a comprehensive education but also for reasons related to our ever-changing, highly demanding, and competitive environments. In addition, mounting evidence in the form of performance indicators, test results, international comparisons, and the experience and observations of parents, academics, and employers suggests that our educational system is in dire need of some fundamental changes/improvements if it is to serve our children effectively. With this in mind, I became involved in a number of activities, all aimed at strengthening the curriculum of public education in Toronto.

First and foremost, I took an active interest in the curriculum by working with my children at home. Participation in school activities, membership in the PTA, and close contact with the teachers gave me a special window on the curriculum that I would otherwise not have been able to gain. It enabled me to help my children more directly with their school work, but it did not allow me to have input into the larger system where important decisions related to curriculum are made.

To do this, I became involved in various committees, conferences, and system-wide developments and events sponsored by the Toronto Board of Education. One such important series of events was the Graduation Outcomes meetings and consultations that took place near the end of 1993.

What was remarkable about these consultations related not only to the importance and relevance of the questions posed but also to the comprehensive means used to garner information. Following the Consultation Guide, the Toronto Board attempted to reconsider and review the curriculum in all subjects from kindergarten to Grade 9. At the centre of this study, parents, students, staff, trustees, and the larger community were asked: "When students graduate from our schools, what should they know as a result of their learning experiences? What should they be able to do? What should they value or care about?"

> Parents were actively encouraged to become involved in all stages of consultation from the initial facilitation process to the final assessment of data.

This comprehensive consultation process involved parents to an extent and in a manner never before initiated. Parents were actively encouraged to become involved in all stages of consultation from the initial facilitation process to the final assessment of data and the response to the draft document. I was invited to take part in the training for facilitators, an important aspect of which involved eliciting and synthesizing diverse viewpoints and pieces of information about graduation outcomes and the curriculum from the constellation of parents assembled at the sessions. During November of 1993, parents together with staff, students, and the public at large spent one whole day contributing to the data that was used to draw up six graduation outcomes.

Notwithstanding the wide-ranging consultation process, there was room for improvement both in terms of the breadth and depth of consultation and with respect to the perception among some that the resulting draft curriculum guide on graduation outcomes, *A Curriculum For All Students (JK-Grade 9) in the Toronto Board of Education*, should have had more of an outcomes-based orientation. In addition, parents had difficulty responding to the initial document because they found the language and concepts vague. For these reasons, parents from Wards 5 and 6 under the leadership of the Downtown Parents' Council and myself, as Chair of the Council, decided to convene our own local graduation outcomes meeting, consisting of a number of parents and staff from schools of Wards 5 and 6 and representing a diversity of ethnic and occupational backgrounds not matched by the three community meetings held by the Toronto Board in late 1993. This forum broke up into three workshops, each of which made incisive and useful observations and criticisms of the draft curriculum.

This stage of the consultation process — responding to the draft — became virtually as important as that which preceded it, for it elicited a range of critical and innovative responses that helped to shape the final product. I was struck by the fervour, sincerity, and deep commitment of the parents attending the Downtown Parents' Council Graduation Outcomes Forum. They voiced serious concerns about the curriculum, finding that the draft curriculum did not go far enough to redress the deficit they felt existed in the cultivation of basic skills related to reading, writing, mathematics, and other core subjects. With this in mind, the parents argued for a comprehensive, detailed curriculum, combining the inculcation of basic skills with an intensive, more rigorous course of studies, starting with the early grades. To ensure the mastery of such skills and content, some parents spoke out strongly for a form of systematic evaluation and/or diagnostic testing at regular intervals, beginning at an early age. They also wanted a system which allowed for the flexible assessment of students' work, taking into account a range of student abilities related to special conditions, backgrounds, and situations and reflecting a sensitivity to children's needs.

There can be no doubt that the Toronto Board of Education has set a valuable precedent in establishing a decision-making process which involves parents, staff, and students in a more open inclusive manner than virtually any other board in this jurisdiction. Improvements, however, can still be made in widening and intensifying the parental base of participation, so that it more completely reflects the cultural, ethnic, and intellectual diversity of Toronto. Even more important is the pedagogical and academic challenge that lies ahead, not just to incorporate the critical, constructive views of parents into the final document but also to translate this commitment to academic excellence into reality.

The Board's Response to the Consultation Input

In the consultation process, the need to deliver on the expectations was emphasized. For 1994/95, the Toronto Board is committed to a list of priorities:

- We are field testing and beginning to implement a new curriculum document that will give teachers clear direction on what is expected in each grade and for every subject from kindergarten through Grade 9.
- We are building on existing strengths within the system including classroom programs and practices and system level initiatives such as Benchmarks to link them to the revised curriculum.
- Since our restructured curriculum is focussed on results, evaluation of student achievement will be based on Provincial and Board Standards. We will field test a common report card and continue to expand strategies for monitoring student progress and communicating with parents.
- We will monitor program implementation to determine where we need to allocate additional resources and focus on professional development for staff.
- In addition to a detailed curriculum, we are developing brochures to explain the new curriculum to parents.

We are continuing to encourage the involvement of parents in our schools and in Board-wide initiatives, since this is the best way of achieving the goals we all share.

By communicating with each other and working together towards our common goals, we can give our students the quality of education they need and deserve.

The Toronto Board's Graduation Outcomes

With input from all interested groups and individuals, we have identified six key *outcomes* that we expect all students to achieve by the time they graduate.

Literacy

Our students will acquire knowledge and skills in all areas of the curriculum including skills in questioning, investigating, critical thinking, problem solving, and decision making. They will be able to apply what they have learned to further studies, work, leisure, daily living, and a lifetime of learning.

Creativity and Aesthetic Appreciation

Our students will be sensitive to the aesthetic dimension of the natural and human world, develop flexible, imaginative ways of thinking, and participate in creative activity and expression.

Communication and Collaboration

Our students will express themselves clearly, listen to others responsively, and communicate effectively using a variety of media, forms, and styles. They will work co-operatively with others to achieve mutual understanding and common goals.

Information Management

Our students will be able to find meaning in our world's vast information resources. They will identify needs, conduct research, and seek solutions using a variety of sources, strategies, and technologies. They will evaluate and apply their findings to make sound decisions and to take responsible actions.

Responsible Citizenship

Our students will value the diversity of the world's people, cultures, and ecosystems. They will understand and actively promote peace, equity, justice, the democratic process, and the protection of the environment in their own community, Canada, and the world.

Personal Life Skills, Values, and Actions

Our students will care about the physical, emotional, and spiritual health of themselves and others. They will pursue healthy, hopeful, purposeful lives and meaningful relationships. They will possess basic life skills and good work habits, deal effectively with stress and change, and make wise choices for a sustainable future (both personal and global).

Projects of the Brock Consortium

A Grass-Roots Approach to Change

JACK MILLER

Head, OISE Niagara Field Centre

Last year the Ministry of Education and Training announced that funding would be made available to assist with the implementation of the Common Curriculum and the Transition Years. The money was distributed to groups across the province on the basis of proposals submitted to the Ministry. I was involved with a group called the Brock Consortium which developed a teacher-based approach to curriculum change. This consortium consists of seven boards of education — Haldimand, Haldimand-Norfolk Roman Catholic Separate School Board, Lincoln, Lincoln Roman Catholic Separate School Board, Niagara South, Norfolk, Welland Roman Catholic Separate School Board — the OISE Niagara Field Centre, and the Faculty of Education at Brock University. Vic Cicci, Director of Continuing Studies at the Faculty chairs the meetings.

The consortium had been meeting for over a year before the funding became available from the Ministry and had already sponsored an institute on the Common Curriculum in August, 1993. At that meeting, Ron Wideman of the Ministry of Education and Training spoke about the Common Curriculum. Groups of teachers and board consultants also met in groups to discuss various topics such as integrated curriculum in the four areas of the arts, language, self and society, and math, science and technology.

In the fall of 1993, the announcement was made regarding the possibility of Ministry funding. The traditional response to this type of funding is to use the money to bring in "experts" to talk to teachers about ways to approach the mandated change. The members of the Brock Consortium, instead, looked to directing the money to teachers to examine issues related to the Common Curriculum and the Transition Years. As a result, notices were sent to each of the schools within the participant boards alerting teachers that they could apply for funding. Teachers could apply as individuals or as groups. The consortium identified certain issues but teachers were free to suggest their own. Mae Denby, Superintendent with Lincoln County, provided much of the leadership in preparing the proposal for the Ministry of Education and Training.

Funding for the project was approved by the Ministry, and the consortium reviewed the applications from the teachers. Fortunately, almost all interested teachers were able to participate in the project. In the end, nine teams were formed. It was expected that each team would develop something, such as a curriculum unit or a video, which could be delivered to other teachers.

The teachers met for an initial orientation session in February. Here they were introduced to the other members of their team and to the general expectations of the project. All the teams consisted of people from different boards of education. Students at the Faculty of Education at Brock University participated on some of the teams as well. Each team participated in the development of their own budget. Funding from the Ministry of Education and Training was used to pay for supply teacher costs, classroom visitations, attendance at conferences, travel to the meeting sites, research materials, and production of the final product. Below are listed the teams and their focusses.

1. *Student Assessment Evaluation*
(13 members from 5 boards)
This was a three-part project linking Transition Years philosophy with the Common Curriculum, essential learning outcomes, provincial standards, and professional development. The first part included the development of a large binder with printed materials and overheads that can be used with in-service staff, parents, and community groups in examining alternative forms of assessment. For example, the package focusses on the use of portfolios in assessment. Second, a conferencing folder to facilitate communication between the home and school was also developed. The folder uses the ten cross-curricular outcomes from the Common Curriculum as a basic framework for assessment. Finally, a computerized reporting framework was developed to facilitate reporting student performance to students and parents.

2. *Program Modification*
(8 members from 4 boards)
This group developed a kit to help classroom teachers modify the curriculum to meet the needs of exceptional students. The kit focusses on four areas: the nature of the teacher, the nature of the learner, strategies for the classroom, and specific program modification suggestions. Teachers are encouraged to reflect on their practices and to address the needs of the learner using appropriate strategies. Teachers can use the kit either individually or in a group setting. The kit also includes a wide variety of support materials as well as video entitled *How Difficult Can This Be?*

3. *Active Living*
(4 members from 2 boards)
This group developed an approach to physical education that is in harmony with the Common Curriculum. A document was developed that outlines the philosophy of Active Living and its relation to the Common Curriculum. The document also identifies relevant outcomes and how to develop a plan in different areas (e.g., basketball) for student growth. Standards and assessment devices are also presented.

4. *Self and Society in The Transition Years* (6 members from two boards)
This group developed a document which stresses that the Common Curriculum is not solely based on knowledge, but also emphasizes skills and values. Thinking skills, organizational skills, and social skills are stressed as essential components in the Self and Society curriculum. The document ensures that teachers can approach the curriculum from this more inclusive stance. The document starts with teachers evaluating their own curriculum and then proceeds to provide a straightforward approach that allows them to develop curriculum that includes the outcomes specified in the Common Curriculum.

5. *Integrated Arts*
(8 members from 4 boards and Brock)
The integrated arts group produced a handbook for Transition Years teachers who do not have an extensive theoretical nor experiential background in dance, dramatic arts, music, and visual arts education. The handbook does not purport to provide all of the information which will be required for a complete program, but it does offer a framework for planning integrated arts units. Two models are presented in the handbook. One model allows partial integration within a standard curriculum that has separate subjects. The second model moves beyond traditional subjects and allows integration around concepts, questions, or themes. Key components of form, function, meaning, and communication are provided, along with a bibliography and a reproducible planning guide.

6. *Plants*
(8 members from 4 boards and Brock)
This group developed a curriculum on plants that integrates the sciences and technology. The Common Curriculum outcomes provide the framework for this unit which also includes computer-simulation software, activity lists, and a representative sampling of audio-visual and print resources.

7. *Integrated Unit of Study and Society/Language*
(9 members from 5 boards and Brock University)
This group developed three units for grades 7, 8, and 9. These units include:

Grade 7 People in Different Cultures

Grade 8 An Historical Survey of Immigration: 1750–1850

Grade 9 Refugees: Numbers, Reasons, and Obstacles Encountered.

Again, the Common Curriculum outcomes provided an initial starting point for developing these units which include activities, charts, and organizers for whole-class lessons, groups, and individual learning.

8. *Integrated Units: MST*
(10 members from 3 boards and Brock)
This group developed a video that shows how three teachers go through a process of developing integrated curriculum. The teachers are from three different departments — math, science, and technology — who develop a unit on "Matter in Motion." The video shows the teachers working through the difficulties of planning as well as introducing the unit into the classrooms.

9. *Personal Identity: A Journey of Growth and Change Integrating Language, Self and Society, and Science*
(7 members from 4 boards and Brock)
This group developed a planning unit for the Transition Years curriculum. They started with a generic organizer and outcomes from the Common Curriculum and then developed student learning activities, assessment and evaluation strategies, teaching strategies and resources, and program modifications.

Conclusions

Participants in the project met August 23 and 24 at Brock University to share their work with each other and a group of additional people not connected with the consortium. I was asked to visit all these sessions and to summarize what had occurred over the course of the project. Below are some of my observations.

1. The task of integrating curriculum is complex and difficult. The units developed in the consortium reflect these complexities. The video developed by the MST group describes how teachers can work together to overcome some of the

difficulties associated with integrated curriculum. For example, the math teacher was reluctant in the beginning to explore integration. This is common, as teachers have generally had a hard time integrating mathematics with other subjects. In this case the initial reservations were overcome as all three teachers became fully involved in the integration process. In all the projects, however, people needed *time* to work together so that they could transcend their particular subjects and roles.

2. Given the limited time to develop materials, I was impressed by the *quality* and *scope* of the final products of each team. Everyone recognized that these products could be improved upon, but still the quantity and quality of materials developed in just a few months were impressive. Also impressive was the mix of print, computer, and audio-visual formats; often this mix was quite innovative.

3. Integration occurs most naturally and effectively when *small groups of teachers* come together around common interests and themes. Integration is less likely to work when it is mandated with top-down models.

> This learning would have not occurred in a traditional professional-development format of lectures and discussion.

4. The participants in this project *learned* much about their chosen topic as well about the process and skills needed to work collaboratively. This learning would have not occurred in a traditional professional-development format of lectures and discussion. The participants will be able to bring these skills back into their own work setting to help other teachers in working with the Common Curriculum.

5. Teachers appreciated the opportunity to work with teachers from other boards. *Networking* was established. One of the norms of teaching is that teachers work alone and often do not communicate or collaborate with each other, even within their school. This project allowed teachers to establish working relationships that can continue beyond the consortium.

6. Finally, I was particularly impressed by *the energy and enthusiasm* generated around the projects. Many of the teams met on their own time as well as on the time provided by the Ministry grant. In a time of Social Contract cutbacks, numerous Ministry mandates, and negative reports on education in the media, the energy and commitment of the project teachers was inspiring. I found my involvement in the project a refreshing tonic.

The Norfolk Board of Education's Approach to Implementation

Practical Approaches, Partnerships, Past Practices, and Professional Growth

JULIANNE WEST

Superintendent of Education, Curriculum,
Norfolk Board of Education

Norfolk's approach to this major provincial policy initiative reflects local expectations and realities. As a small rural board (10,000 students in 28 widely scattered school sites), with limited financial and human support resources, the approach we adopted to the Common Curriculum had to be:

- practical and frugal
- based on partnerships and local ownership
- built on successful past practices and innovations
- oriented to the necessary professional growth in knowledge, skills, and attitudes to ensure actual implementation of the new policy document

In summary, the approach had to "make sense" to the parents, educators, and ratepayers of Norfolk and to be perceived by them as being in the best interests of Norfolk students.

A conscious decision was made to begin not with development of numerous discrete outcomes at various grade levels, but rather to focus initially on the desired endpoint of our considerable educational efforts. What should the Norfolk graduate prepared to live successfully in the 21st century know, be able to do, and be like? We began, therefore, by attempting to identify our key exit or graduation outcomes under three categories — knowledge, skills, and attitudes.

This task involved an extensive, ten-month process enlisting assistance from our various partners in education (trustees, parents, educators, students, Board support staff, community organizations, and ratepayers). Working in small groups, participants completed a two-fold task. First, they focussed on our rapidly changing world and then they discussed the characteristics a graduating student would need to thrive in the new century. As a result of this broadly based, consultative process, a significant number of Norfolk stakeholders in education had a direct say in the development of our graduation outcomes.

While the above process was underway, the Board's six curriculum supervisors (JK–OAC) played a crucial role in various ways. First, they ensured that, where possible, new initiatives built upon previous innovations. They also utilized local teacher and community expertise in relevant areas such as global education, environmental studies, local heritage studies, integrated learning, co-operative learning, technological education, the arts, experiential learning, computer utilization, healthy living, and anti-violence curricular endeavours.

Curriculum supervisors also reached out to colleagues in neighbouring boards (Haldimand, Six Nations of the Grand, Lincoln, etc.) and provincial institutions (OISE Niagara Field Centre and Faculty of Education, Brock University) by forming educational consortia funded by the Ministry of Education and Training. Both the Tri-Board Consortium and the seven-board Brock Consortium proved to be practical, cost-effective, collaborative partnerships to facilitate educational change.

By combining the expertise and resources of various boards, an effective, economical means of providing necessary professional growth experiences for staff was established. Using a "train-the-trainer" model, joint Tri-Board sessions focussed on "The Ministry Perspective on *The Common Curriculum*," "Leading the Co-operative School," and "An Outcomes-Based Approach to Education" with emphasis on the ten Essential Learning Outcomes. The latter session also brought together a core curriculum leadership team of two teachers and an administrator from each school to support grass-roots change.

These professional growth sessions culminated in two summer institutes: Tri-Board's "Jump-Start '94" featuring Practical Strategies for the Common Curriculum Classroom, and the Brock Summer Institute focussing on Developing Integrated Curriculum. At the Brock Summer Institute, teams of Transition Years teachers shared both the integrated units and the teaching resources they had developed through Brock Consortium funding.

Two other professional growth initiatives have potential for significant impact at the school level. Both recognize the importance of school leadership in promoting and sustaining any required change in classroom practice. In the first instance, department heads from Haldimand, Norfolk, and Lincoln took part in a two-year series of sessions (under the guidance of the OISE Niagara Centre) focussing on Transition Years implementation with emphasis on changing assessment and evaluation practices.

The second initiative involved Norfolk's restructuring of the elementary principals' monthly meetings. The traditional administrative or business meeting continued to be held in the morning. In the afternoon, elementary principals were joined by their colleagues from the secondary panel along with vice-principals, curriculum supervisors, special education co-ordinators, superintendents of education, and the Director. This resulted in a year-long educational-leadership training series. The small-group, adult-learning model supported shared understanding and problem solving as we pooled expertise and developed new insights into our evolving role as leaders of mandated change within our schools and system. This format was generally well-received and is continuing during 1994/95.

> The small-group, adult-learning model supported shared understanding and problem solving as we pooled expertise and developed new insights into our evolving role as leaders of mandated change.

Transition Years implementation in Norfolk requires special mention. Like teachers elsewhere in the province, we have been experiencing growing pains. The Board's implementation committee (which includes members from all Federations and teachers of Grades 7, 8, and 9) continues to play a crucial role in overseeing the development and implementation of this aspect of educational change. In particular, committee members have played a strong advocacy role for the needs of students and teachers.

By December of the first year of implementation, it was clearly evident that teachers needed to be heard. The Transitions committee, therefore, conducted focussed interviews (Transitions teachers interviewing other teachers) in each school. Major interview questions included:

- What approaches to programming are currently being used?
- What factors facilitate teaching and learning in Grades 7, 8, and 9?
- What factors impede it?
- How is student progress assessed, evaluated, and reported?
- What do teachers need to improve teaching and learning in these grades?

The results were two-fold. Teachers very much appreciated being able to voice their experiences of change. Equally important was the wealth of information generated. The interview teams assisted in the consolidation of the data into two focussed reports (elementary and secondary). Since educational change is a shared responsibility, the reports contain specific recommendations directed to our various partners in education.

Several key recommendations emerged from both the elementary and secondary reports that highlighted the need for:

- development of significant, specific learning outcomes for Grades 7, 8, and 9
- common planning/meeting time within schools and families of schools to work on the "how" of *Common Curriculum* implementation
- provision of adequate resource support for high-risk Transition Years students and for their teachers to ensure that all students attain the required learning outcomes
- ongoing teacher education to develop the new knowledge, skills, and attitudes required by the changes

There is no doubt that Norfolk teachers and administrators recognize the great challenges, opportunities, and responsibilities they face in the closing years of this century. Perhaps a retiring secondary principal summed it up best in his June farewell to his staff and colleagues. He assured us that we have what it takes to bring about necessary changes in education. He reminded us that our ancestors had the courage to change their lives and immigrate to Canada so that we could live comfortably in the 20th century. Similarly, we have the wherewithal to change so that our Norfolk students will have the education necessary to live comfortably and successfully in the 21st century.

Teacher Partnerships

At the Heart of Implementation

MARY CURRAN

Teacher, Senator O'Connor College School, Metropolitan Toronto Separate School Board

My experiences with formal cooperative learning began five years ago. At that time, I saw collaboration as a useful, new teaching tool — something I could add to my existing repertoire of teaching skills. But I now recognize that collaboration in its purest sense requires much more: a re-examination of existing school procedures, a fresh look at school relationships, and an excavation of educational beliefs. Without this, collaboration is a teaching practice detached from principle, a technique only distantly related to the sharing of power and influence which lies at the heart of real collaboration. It is this shared leadership that confers on each person "the freedom to be responsible, to make decisions about what that responsibility requires" and ultimately leads towards personal and collective accountability (Harrison, 1985, p. xxix).

Sometimes, school is a barren spot in which to try these new collaborative endeavours. If you visit my school, walk down the corridors, observe the desks in rows, and listen to teachers talk, life seems much the same today as it was back when Goodlad produced his famous study on schools (Goodlad, 1984). But this is not the whole picture. Collaboration exists in small pockets of the day as more of us now use some form of group work in classrooms. More importantly, we have worked closely together for over two years to develop a radically different Grade 9 program for our school. As a result, I now understand that a primary focus on student collaborative learning obscures another reality. If we want to observe the extent of healthy collaborative learning in any school, we must look closely at how teachers work together.

Our school has made dramatic changes along these lines as we responded to Ministry of Education and Training directives on destreaming and the implementation of The Common Curriculum. Early in the fall of 1992, 25 teacher volunteers gathered around our principal to develop a program for our first destreamed class in 1993. For the rest of that year, these teachers worked constantly together. Recently, I found the "archives" of our meetings from that period, collected by our school librarian, an active team member. The theme of partnership resonates through those documents. Neatly filed are summaries of the work of small committees who researched mentorship, evaluation and reporting, literacy, holistic education, and five other areas of interest. Then there are the agendas from our large group meetings where all of these reports were discussed. But the procedures that coagulated this flurry of activity were unlike our traditional staff meetings.

At first, a steering committee directed our actions, and in our meetings we faced the chair and took turns in discussion. But gradually the format changed. We decided to divide into small groups with our markers and chart paper as we brainstormed and clustered our ideas. For a time this was embarrassing because we had not practised on ourselves what we demanded of our students. However, the task we faced seemed so great that we were ready to risk new procedures.

Over time, exchanges with each other became more open. There were intense debates inside and outside meetings on issues related to thematic teaching and integration across subjects. During this time, I believe we experienced the great creative processes at work in small groups sessions; what Hare (1982) describes as the freedom to "alter ideas already expressed or receive encouragement to go off to new uncharted areas of creative endeavour" (p. 119). With our principal's active participation and encouragement, our committees had developed into teams.

It took five months to formulate a new Grade 9 program integrating five subjects, English, theology, keyboarding, social science, and physical education. Ten teachers had also volunteered to spend half of each school day teaching the program to ten integrated classes. Thus, prolonged teamwork, not short-term committee procedures, led to the creation of our integrated program. In our long collaborative labours, we had altered some of our perceptions of problem solving.

This perceptual shift revealed an inadequacy in existing departmental structures. Early in our planning year, the teacher volunteers requested input on the Common Curriculum from our department heads. Their responses arrived in writing — an efficient, linear process with little ongoing dialogue among the heads themselves or with the teachers involved. Here were two very different procedures at work: one based on the traditional approaches to problem solving along subject-division lines; the other developed organically by teachers outside department divisions. New processes demanded new partnerships.

Partnerships

When the ten teacher volunteers formed an integrated teaching-team in April 1993, they represented five different departments and the first great integrated step in our school's history. In our last meeting of that planning year, we met in the lecture hall and divided into small groups. Somewhat sheepishly, we drew on chart paper how we saw our year's work. The art that we pinned to the walls showed hope and apprehension: mountains, rope bridges, ships, and vast seas predominated. Exploration, discovery, and solidarity were very much in evidence. Indeed, our commitment to collaboration was so strong that we asked for scheduled team-planning time on the master timetable for the upcoming academic year. At this point, we recognized that the weekly team meetings and the monthly large group sessions would take us beyond the "instructional solitudes" of our past experiences as teachers (Huberman, 1993).

In his critique of teachers at work, Huberman (1993) states that "noninterference with the core work of others constitutes a sign of professional respect" (p. 29). We encountered problems along these lines almost as soon as we began work. In September 1994, the two teaching teams met weekly in the new Transition planning room, where specialists helped each other prepare lessons — our own version of the jigsaw. Months passed as we debated the format of meetings. Reluctantly, we re-opened discussions on the necessity for these sessions as some members continued to express preferences for working independently. Monthly large-group meetings presented further problems. We debated the same issues over again. We persevered.

A seminal point occurred nearly halfway through the year when one team member courageously raised a critical issue. He asked us to address as a group the silence of certain team members in our discussions. There was discomfort, but as a direct result of that confrontation we established a rotating chairperson. In future meetings we also decided to use a circle format with each person taking turns to talk or to pass.

> We had to learn new ways of talking to each other about philosophy, policy, and practice, without the benefit of administrators to direct professional activities.

In the past when we had worked together on other school projects, committee work predominated with a traditional chair and agenda. Such groupings were task oriented and had a very limited life span. Now we were committed to scheduled, ongoing meetings. So we had to learn new ways of talking to each other about philosophy, policy, and practice, without the benefit of subject divisions or administrators to direct professional activities. We also began to support each other professionally: relationships had become part of the formal agenda.

For example, one team member suffered from ill health and a difficult class. In December, since we had each publicly aired our class difficulties in weekly team meetings, we were able to work through the problem with our colleague, brainstorm solutions, and make a final decision together. In Huberman's phrase, we had made it easier to "intrude on each other's instructional practices" because of our "friendship, tolerance [and] solidarity" (p. 33).

This interdependence was also apparent in the discussions we held on subject content. The Common Curriculum had arrived in various draft stages while we were engaged in our planning year. If we were intimidated by the size of the document as subject specialists, we were overwhelmed by it when viewed from the perspective of an integrated curriculum. How could one teacher with 26 Grade 9 students hope to cover outcomes from five different subject areas in one year? In the old days we would have struck a committee to consult and report to the staff — a short-term procedure at best. But not now.

With a new confidence, born out of collegiality, we extracted some outcomes that seemed workable for the coming year, aware that these would have to be re-examined later. Our teams offered us a natural, continuous review process for working through the document. Collective expertise gave us both a sense of voice and choice in writing curriculum (Thiessen, 1994).

This confidence was hard earned. From the beginning, we had anticipated trouble over content. In our planning stage, subject specialists had argued passionately for their core content in the integrated program. When months and meetings rolled by, these arguments subsided once we came face to face with the vast quantities of subject-based information that our Grade 9 students faced. Gradually, we talked less about quantity of content and more about quality — about materials, methods, and activities. So this was what student-centred learning looked like — a preoccupation with student learning and an increased awareness of our own learning processes as we grappled with new subject areas. We had experienced yet another perceptual shift.

By the end of our first year of teaching the integrated program, new collaborative processes and professional partnerships had emerged. But there was another fundamental change. We had excavated our educational beliefs during our months in the Transition team room.

Changing Beliefs

Although our team members differed on many fundamental issues, we began with one vision: all students should be educated together. Other beliefs had to be negotiated and debated.

We began to reclaim the power and responsibility that we had traditionally accorded to others. Using this power and influence was hard work. Initially we worried about inefficiency, about our inability to get things done quickly, until we accepted that interdependence is messy and time-consuming because it has to involve everyone. But the sense of responsibility and accountability that we eventually experienced could not have been created using old models of decision making.

Nor was blame possible. Since we created our program, any problems were ours to solve. A corollary of this was a new perception of ourselves as policy makers. We felt able to take charge of our new program using Ministry and Board documents and policies. Now we could see ourselves as partners with them, not the last link in an administrative chain. There is no collegiality in such a structure.

Instead, as we stepped into other subject areas in our teamwork (a true collegial setting), we became learners ourselves, explicitly negotiating the tensions around the dilemma of teaching school subjects versus teaching school learners. How could we ease the stresses that develop in classrooms between what experts thought students needed to know and what our young people actually wanted to learn? Attempting to answer these questions, we became curriculum designers ourselves.

For the present and the future, these changed beliefs will continue to have a profound impact on our school procedures and professional relationships. As we learn the art of partnership with colleagues at school, partnership with Board and Ministry must follow. So too must partnership with our students and parents. This is new territory for all of us, as our staff discovered.

REFERENCES

Goodlad, J. (1984). *A place called school*. New York: McGraw Hill.

Hare, P. (1982). *Creativity in small groups*. Beverley Hills, CA: Sage Publications.

Harrison, B. (1985). *Making the connections. Essays in feminist social ethics*. (C. S. Robb, Ed.). Boston: Beacon Press.

Huberman, D. (1993). The model of the independent artisan in teachers' professional relations. In J. Little & M. McLaughlin (Eds.), *Teachers' work: Individuals, colleagues, and contexts*. New York: Teachers College Press.

Thiessen, D. (1993). In the classroom, in the corridors and in the board room — The professional place of Canada's teachers in future policy making. *Journal of Education Policy*, 8(3), 283–303.

The Ontario Curriculum Clearinghouse

Sharing Resource Materials

LYN SHARRATT

Chair, Ontario Curriculum Clearinghouse, Director, Curriculum and Program for the Ontario Public School Boards' Association

SUSAN LANGLEY

Executive Director, Ontario Curriculum Clearinghouse, Former President, Federation of Women Teachers' Associations of Ontario

Teachers have always shared resource materials with one another. Even as early as the 1960s, when most teachers worked in isolation, there were pockets of co-operation where teachers team-taught, shared their resources, and sought out additional resource materials from the wider community. We like to say that teachers are expert scroungers. We even remember one resourceful teacher who used to comb garage sales to obtain materials for use in her classroom!

During our 25 years in the teaching profession, it has always been our practice to share with others and to encourage sharing. One of our most wonderful memories of teaching is the experience of team teaching — watching, learning from, sharing ideas, materials, and expertise, and laughing and crying with a colleague. The most effective teachers with whom we have worked were those who planned, reflected, and dialogued together as teams. Those who continue to indulge in parallel play, as Roland Barth calls it, lose the benefits of learning communities.

However, teachers' efforts to share resource materials and their own expertise have been hindered by the fact that there was no one central agency to co-ordinate sharing. It is our hope that the Ontario Curriculum Clearinghouse (OCC) has begun to fill that need.

The concept of a curriculum Clearinghouse has been floating around associations such as the Association of Large School Boards of Ontario, the Ontario Teachers' Federation, and others since the 1970s. In fact, the francophone system has had the Centre franco-ontarien de ressources pedagogiques (CFORP) since the early '70s. CFORP is a very successful centre for the creation and sharing of curriculum materials and is a fine model to study.

CFORP began with one ditto machine, a Local Initiatives Program grant, a visionary superintendent, and paper donated by area principals. Today, with Ministry of Education and Training funding, a staff of 40, and 7 departments, CFORP's focus is on developing integrated French-language materials. The major difference between the OCC and CFORP is that CFORP actually produces and publishes materials. The OCC's mandate is to co-ordinate the sharing of curriculum resource materials, with production left in the hands of educators both inside and outside of the education system.

A number of circumstances combined to help the OCC project finally come to fruition on May 3, 1994. Some of these circumstances included:

- the Provincial Auditor's report, which called for a better balance between local adaptation of curriculum and the high cost of 170 boards developing curriculum independently
- the fact that most boards simply no longer have the money or staff to involve themselves in the time-consuming and costly process of developing curriculum
- the change to the *Common Curriculum* that gives much more responsibility to the local boards and teachers to develop curriculum based on the defined outcomes
- the arrival of the OTF's Creating a Culture of Change initiative, and its obvious success in enabling teachers to talk professionally with one another all over the province
- the willingness of the Ministry of Education and Training to provide an incentive to groups willing to collaborate on projects that would eventually save money for the education community

The goals of the Ontario Curriculum Clearinghouse are:

- to identify and encourage the sharing of curriculum and resource materials among school boards and teachers
- to encourage co-operative development of curriculum and resource materials
- to provide easy access to information about materials
- to give teachers and school boards access to materials at low cost

During the first year, the OCC has focussed on curriculum resource materials:

- for the Transition Years (Grades 7–9) produced or revised since 1991
- consistent with the *Common Curriculum*
- of sound scholarship and relevance
- free from bias
- for teacher use in preparing curriculum for lesson plans, guidelines, and for teaching strategies

The OCC is a non-profit, independent organization funded by the Ministry of Education and Training and operated in partnership with six stakeholder groups:

- Ontario Teachers' Federation (OTF)
- Ministry of Education and Training (MET)
- Ontario Public School Boards' Association (OPSBA)
- Ontario Separate School Trustees' Association (OSSTA)
- Ontario Catholic Supervisory Officers' Association (OCSOA)
- Ontario Public Supervisory Officials' Association (OPSOA).

The representatives of these six organizations are committed to making the OCC work. As a collective they focussed their individual hopes and dreams for this project into the following mission statement for the OCC's *Stage I Catalogue*:

> The Ontario Curriculum Clearinghouse is the central point of contact for sharing information about transition years curriculum resource materials among teachers and school boards throughout Ontario.

The vision statement for Stage II shows

their commitment to a much bigger, long-term picture.

> The Ontario Curriculum Clearinghouse is the central point of contact for facilitating the sharing of curriculum resource materials among teachers and school boards throughout Ontario.
>
> The Clearinghouse is accessible, responsive, and interactive. We work in cooperation with educators to foster the timely development and delivery of innovative, high quality resource materials to meet contemporary curriculum needs.
>
> The Clearinghouse uses a variety of communication methods to ensure equity of service to all teachers in Ontario.
>
> The Clearinghouse includes curriculum resource materials from the broader public and private sectors as part of our continuing effort to provide teachers with access to the knowledge and expertise of the community as a whole.

The Vision of the OCC fulfils many of the Provincial Auditor's recommendations:

- partnership
- availability of high-quality curricula
- consistency
- reduction of costs
- avoidance of duplication
- sharing of best practices and successful programs
- access to all curriculum resources, especially for those in the North

The *Stage I, Transition Years Catalogue* was distributed in January 1995. Many teachers told us that it must be distributed in print form as well as in an electronic version. Many teachers still feel unsure around a computer, while others have told us simply, "Putting the catalogue on the electronic network is the way to go, but I'm swamped and I haven't had time to get on the network."

Therefore, in order to achieve equity of access, the catalogue was developed on an electronic database, but first distributed in print form. It is expected soon on the electronic network through the OTF 3C's Projects and ENO and on the ONeducation CD-ROM version piggy backed with the 1995 version of *The Common Curriculum*. A floppy disk version is planned for later this year. We are striving to actually get a copy of the catalogue into the hands of "real" teachers and maintain the feeling of "people talking to people" — an apparent challenge!

From the very beginnings of this project the main focus has been on helping teachers to gain access to curriculum resource materials as easily as possible. Teachers, among others, have responded with enthusiasm about the project. "Not having to write the same curriculum document over again is high on my priority list!" said at more than one teacher.

Teachers have contacted the OCC by phone, letter, or through the Electronic Village. Any teacher inquiry is welcomed. We are happy to try to respond to requests about materials and include teachers on our mailing list. We have already been able to help teachers with inquiries, such as the teacher who called looking for information on the locks system in Ontario!

Other teachers have been consulted by us or attended our presentations. All have given us very clear messages about the directions the OCC should take. We have attempted to take all of the ideas into consideration as we planned Stages I and II of the Clearinghouse.

What teachers most lack are access to up-to-date information sources [and the] ability to communicate instantly and effectively with other people outside their island-prison school environments.

We are happy to announce that we were able to achieve more than we had imagined in Stage I. For instance, our first electronic catalogue has modest interactive capabilities. It includes a comments area that will allow users to comment upon the listed curriculum and to share their successes, failures, and creative adaptations. This area will also allow teachers to note additional resources related to the listed curriculum resource material and to contact other users of the material. It is our desire to enable the classroom teacher both to access materials and to be able to interact with others who have used the materials, to find out how they have used them, how they have worked, and even to find out about other compatible resources. The print catalogue also contains comments forms.

To achieve "teacher-user friendliness" in Stage I, we have also created key concepts that will link related terms. For example, a teacher searching for the term "integrated curriculum," would also find resources stored under such words as "holistic," and "cross-curricular."

Another component of the OCC's vision, and one of its perceived values, lies in its future ability to collect curriculum resource materials not only from Ontario sources, but also from across Canada and internationally, as long as the documents in question meet the criteria established by the OCC stakeholders.

Most important, however, is the focus on the teacher. Doug Walker, a teacher, said in a Canadian Teachers' Federation document called *Electronic Networking — A Jump on the 21st Century*, "What teachers most lack are access to up-to-date information sources, ability to communicate instantly and effectively with other people outside their island-prison school environments, ability to share suffering and joy with others who share the same visions and concerns, ability to make a difference..." The vision of the OCC is to help change this situation.

The response to this concept has been overwhelmingly positive from all sources. Teachers have said, "It's about time! We need it yesterday!" One teacher wrote:

> I see our Board supports such as consultants, curriculum departments, and continuing education being diminished due to stringent financial constraints. This is leaving us as educators with little incentive, and few opportunities to develop and share innovative projects. If well organized and liberally advertised, your Clearinghouse project should flourish as a successful venture.

There are many unanswered questions, not the least of which is the question of sustainability and our potential position as a result of the new centralized curriculum announcement; however, we believe that if we listen carefully to teachers and take the time to maintain the concept of an easy-to-use, accessible central curriculum resource vehicle, we will be successful. The way to ensure that we are listening is for teachers to continue to contact us.

It is our hope that teachers will speak to us by e-mailing us, by commenting on the curr_clearinghouse conference on the Village, or by calling us at 1-800-837-3048 or 416-591-1577. We are developing a database of inquiries and feedback to help us to fulfil our goals of meeting the needs of the teachers in the province and facilitating the teacher's role as "learning coach and guide."

Suggestions for Teachers

Connecting Learning Outcomes and Integrated Curriculum

SUSAN M. DRAKE

Professor, Faculty of Education,
Brock University

Across North America, school systems are negotiating new models of education; as a clearer picture emerges, it appears that there are many commonalities in these new models. New approaches to education involve corresponding shifts in philosophy, outcomes, instructional strategies, assessment, and reporting practices. In practice, boards of education or schools tend to begin with a shift in one area. However, since new models are grounded in new understandings of teaching and learning, a change in one area will lead to changes in all of the other areas. For example, some boards have started with integrated-curriculum initiatives but have found that these shifts in practice demand new instructional strategies, outcomes, assessment, and reporting. Others have started with new reporting or assessment practices or an outcomes-based approach, but all beginnings seem to lead to a remarkably consistent vision of education.

Philosophy — What's worth knowing?

Based on the premise that the purpose of schooling is to educate students to be "productive citizens of the 21st century," new models of education are being developed. This forces educational planners to revisit the question of "what's worth knowing?" In the past, this question was answered with the content and the skills of certain disciplines. However, there has been a shift to thinking that perhaps it is the cross-disciplinary skills that are most crucial to learn.

What are these skills? When individuals reflect on their school experiences they usually discover that the things they learned were memorization, literacy, numeracy, "how to play the game," and interpersonal skills rather than content or even disciplinary skills.

These were typical outcomes for successful students of the traditional educational system. What outcomes lead to the productive citizen of the future? Many believe that these skills should include such things as numeracy, literacy, interpersonal skills, dealing with change, complex problem-solving, ethical decision-making, information management, and systems thinking (see, for example, the Conference Board of Canada's *Employability Skills Profile*). These skills are interdisciplinary, and although they can be taught in a distinct subject area, there will be greater transference if we teach them — as they are experienced — in real-life contexts. And real life is not fragmented into disciplines.

How do we learn?

Most educational decisions being made today are grounded in new assumptions about teaching and learning. People learn by being actively involved in something that is meaningful and relevant. They learn at different rates and in different ways. Knowledge is constructed by the learner through social interaction. And we learn by making connections with past experiences. Finally, the environment needs to be experienced as a safe place where students can risk making mistakes in order to reach high expectations.

If we take these concepts seriously, they have profound implications for the classroom. They should direct our instructional strategies and be compatible with our assessment and reporting procedures (especially considering that assessment often drives curriculum). If we learn by doing, we should provide hands-on learning experiences and assess the doing

> Most educational decisions being made today are grounded in new assumptions about teaching and learning.
>
> —Susan Drake

through performance assessment. If we learn by the social construction of knowledge, it makes sense to work on occasion in collaborative groups and to assess the collaborative process (collaboration being a fundamental skill for the productive citizen of the future). If we learn by making connections, we need to make connections when we teach; this leads to integrating curriculum and assessing the learning in a new way.

Outcomes

One of the basic tenets of outcomes-based learning is that all students can succeed. This means that they can all achieve the mandated outcomes, although they may not all do it at the same rate and in the same way. This "success for all" philosophy requires important shifts in thinking. First an educator must believe that all kids can learn. The question then becomes, "How can I engage these students in a way that they can all succeed?" This is a very different concept than expecting students to learn because the teacher has transmitted information and it is the students' responsibility to learn it. Taking this challenge seriously usually means a shift to instructional strategies that are more active and personally relevant.

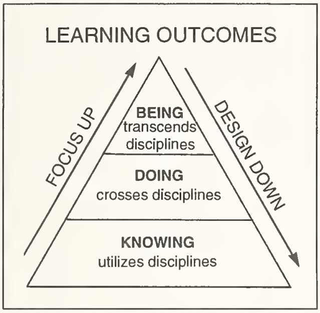
Outcomes are the "observable, measurable" results that students are expected to achieve at an acceptable level. They are concerned with what students must know, can do, and should value. Performance assessment becomes the valid way of measuring the doing. Standards define what is an acceptable level for any outcome. Ontario has developed expected outcomes for Grades 3, 6, and 9. This leaves open many questions. What does the teacher teach to get the students to achieve the outcomes? Are there levels of growth for each outcome?

As educators work with outcomes-based approaches, a general pattern emerges that seems to work. One framework that is often adapted is Spady's (1994) demonstration mountain. Spady uses a triangle divided into three sections; during students' educational careers, they are climbing the mountain (three layers) of outcomes. At the top of the mountain are the exit outcomes that reflect higher-order life skills. These are to be achieved by students when they leave the program — usually this is considered to be Grade 12. The second layer includes interdisciplinary skills such as higher-order thinking skills. At the bottom of the triangle are the more traditional outcomes that may reflect disciplinary procedures and can be content based. Spady emphasizes that no matter where the student is working on the demonstration mountain, the teacher should always be concerned with the exit outcomes. For teachers, the key in planning curriculum is to "design down" from the exit outcomes.

Redefining the Outcome-Demonstration Mountain

I think that we can visualize Spady's demonstration mountain somewhat differently to make sense of outcomes in the Ontario context (Figure 1). In the top third of the triangle, the outcomes are very broad and concerned with life skills, with the kind of person that the student will *be* when he or she finishes the program. This involves attitudes and values as well as doing and knowing. The middle third focusses on *doing* and knowing. The bottom third emphasizes the *knowing* aspect of learning. When we "design down" from the being layer, there is always a concern with developing a positive sense of respect for self, others, the community, and the environment. Ontario students will be people who have a sense of social responsibility and a commitment to democracy.

Figure 1



Many boards and/or schools are defining the characteristics the student will display when they leave school. These examples of outcomes describe how the person will be with what they know and can do. For example, Georges Vanier School in North York has defined the exit outcomes as: self-directed learner, creative problem-solver, effective communicator, collaborative contributor, and quality producer (Craig, 1994). Iroquois Ridge in Halton includes the following exit outcomes: behaves responsibly and demonstrates self-confidence, implements a plan for physical and mental health, and contributes to the improvement of the environment. The Norfolk Board of Education specifically names values and attitudes in its exit outcomes — for example: self-respect, respect for others, and being a responsible citizen (Drake & Miller, 1995).

The being domain is problematic for assessment when we realize that some of the characteristics involve values and subjective judgments. They do not necessarily fit into the observable measurable category. It seems to make more sense to *recognize this as a gray area without letting go of the necessity of this category*. The being domain is of fundamental importance because it informs our daily actions as human beings on this planet. The Nazis were very good at "doing" the higher- order thinking skills, but did not attend to "being" caring, responsible humans. In spite of problems with measurability, we need to consistently plan by focussing on the top third of the triangle, the being part, while we design down to the lessons.

The essential outcomes of the Common Curriculum tend to fall into the middle third of the triangle. They are intended to be cross-curricular and the emphasis is on doing. They include communicating effectively, solving problems and making responsible decisions using critical and creative thinking, and using technology effectively. Higher-order thinking skills are emphasized, and these outcomes make a "good fit" with the Conference Board of Canada's *Employability Skills Profile* (skills deemed necessary for the productive citizen for the future).

However, the essential learning outcomes also involve the being realm. This can mean that certain aspects of the outcomes are not easily measurable. For example, responsible decisions, creative problem-solving, responsible citizenship, and applying aesthetic judgment may fall into this category. Even seemingly clear outcomes, such as using technology effectively, can take on ethical dimensions. Again, it is helpful to understand the essential outcomes in terms of the demonstration mountain.

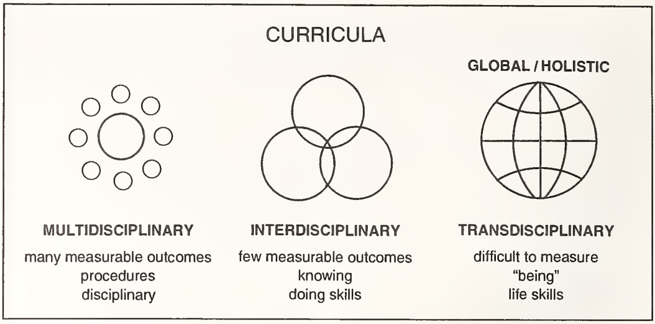
How does a teacher make sense of these outcomes? The specific learning outcomes fall into the bottom third of the triangle. These are much more specific and detailed and can be more discipline-bound. The content tends to be emphasized at this level. A first response is to turn to a long list of specific learning outcomes to generate outcomes. This makes sense because it is a similar process to the traditional approach of generating many objectives before deciding on strategies and assessment. However, it defeats the purpose of outcomes-based learning because it allows us to teach in the same way. Following the principles of OBL, the teacher should begin with the ten essential learning outcomes and design down for the structure of daily lessons. In developing our daily lessons we need to keep our focus on the kind of person we want the student to be. Then we are in a better position to decide what students should be able to know and do as we design down from the exit outcomes to develop curriculum.

A common criticism is that in emphasizing skills, there is little or no knowledge base. However, it is impossible to execute the skills without a knowledge base. Given the exponential increase in knowledge, teachers need to be very selective about what content to select in order to teach the skills.

Degrees of Integration

Integration efforts seem to fall on a continuum; that is, there are degrees of integration (Figure 2). At the lowest level of integration, a theme is chosen and applied to the different subject areas. For example, students may study water and go to different learning centres or classrooms to study water and science, water and English, water and history, water and math. This can be called the multidisciplinary level. The next level is interdisciplinary where the emphasis is on skills that cross the disciplines such as higher order thinking skills, interpersonal skills, or literacy. Again, students will study a theme such as water but the emphasis will be on the skills rather than each discipline. However, the disciplines still offer a lens for planning. At the end of the continuum is a curriculum that is totally integrated. This could be called *transdisciplinary*. Disciplines have not been used for planning. The real life context is the starting point (and if one looks, the disciplines are usually there). The problems with the local water system would be an example of a fitting starting point.

Figure 2



The important thing to note here is that each level of integration has a different answer to what's worth knowing. The multidisciplinary position values the procedures of the disciplines. Therefore it is possible to go on with curriculum design in much the same way as in the past. Given its familiarity, it makes sense that this is where educators start with integration efforts. This tends to match the bottom third of the demonstration mountain — knowing.

The interdisciplinary position values skills as the most important thing to learn. In reality, this shift is a very radical one; it puts content and the disciplines in a secondary role. Since the skills are cross-disciplinary they can be taught through any number of themes or subject areas. At this level, the skills being taught can usually be observed and measured. This matches the middle third of the demonstration mountain — doing.

In the transdisciplinary position, the lessons develop through the real-life context rather then the lens of the disciplines. Emphasis is on what is relevant and meaningful to the learner. Often negotiation of the curriculum around students' questions plays a significant role in the development of this curriculum. The goal is to help create a "nice" and caring person. This person will be a responsible citizen who has acquired higher-order life skills such as flexibility, perseverance, caring for others, and the environment. Clearly, this student must also acquire the interdisciplinary skills. When we move into this realm, the outcomes are very hard to measure; many involve both the head and the heart and can only be demonstrated long after school is completed. Therefore these outcomes are very difficult to measure. This tends to match the top third of the demonstration mountain — being.

These models appear on a continuum that may imply that one is superior to another. However, the continuum simply reflects degrees of integration. In practice, people often experience a continuum as they go through the process of making connections. One level seems to lead naturally to the next. Others are comfortable jumping in with a transdisciplinary approach. However, *it is not clear that one model is better than another; perhaps one is more appropriate at one time than another.*

The KISS Model

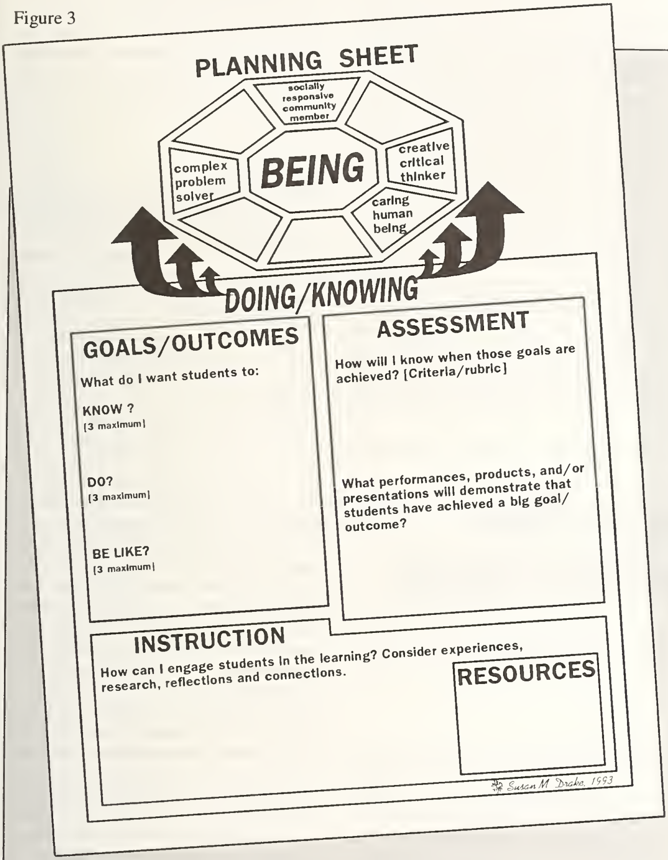
I have found an effective method to allow planners to make the shift from a content/discipline-based approach to an outcomes-based skills approach. It involves working with only one to three major outcomes for a unit *before connecting it to any content* (since there are many roads to an outcome). After educators have decided upon major outcomes and the necessary skills and subskills at a very generic level, all planning of instructional strategies and assessment procedures is focussed on the outcomes.

At first this is very difficult to do since we are thinking in new ways and do not yet have a very sophisticated road map for what skills look like when they are achieved. However, once teachers work through the KISS (Keep It Simple Strategy) model, it becomes easier and more productive to plan from this vantage point. It also facilitates working with outcomes to its fullest advantage. Two planning tools are offered — a planning sheet (Figure 3) and the KISS model of integration (Figure 4). These tools are intended to be used together.

In Practice

The shift to an outcomes-based integration model may be best understood by examining what happened in Bruce Hemphill and Ron Chappell's destreamed Grade 9 science classes at Merritton High School in

Figure 3


socially responsive community member
creative critical thinker
caring human being
complex problem solver
BEING
DOING/KNOWING

PLANNING SHEET

GOALS/OUTCOMES

What do I want students to:

KNOW ?
[3 maximum]

DO?
[3 maximum]

BE LIKE?
[3 maximum]

ASSESSMENT

How will I know when those goals are achieved? [Criteria/rubric]

What performances, products, and/or presentations will demonstrate that students have achieved a big goal/ outcome?

INSTRUCTION

How can I engage students in the learning? Consider experiences, research, reflections and connections.

RESOURCES

Susan M Drake, 1993

Figure 4 **The KISS Model of Integration**

KISS (Keep It Simple Strategy) is a generic model that can be used for short-term educational experiences or for long-term projects. Start with an exploratory session with those involved to find common points of interest, current belief systems, and possible topics or themes. Realize that the following process is not linear but shifts back and forth from step to step. What is important is that all the parts are considered. However, after initial explorations, determining outcomes should always be done first.

1. Decide on one to three major, cross-curricular learning outcomes that you wish students to achieve (one is best, more than three will not work). Do this before making any decisions on content — the content is the vehicle to achieving these outcomes.
2. Decide how you will know when these outcomes have been achieved at an acceptable level. This involves several steps.
   A. What will a student have to know to achieve outcome?
   B. What will a student have to do to demonstrate achievement?
   C. What kind of person will the student be when demonstrating the outcome?
   D. Develop a rubric (criteria). To do this, break down the major skills into the subset of skills that a student can be conscious of acquiring.
3. Choose a topic, issue, or theme. Put this at the centre of a large piece of paper. Brainstorm for connections to develop the content base.
4. Review the broad learning outcome(s). Choose a culminating activity where learners will demonstrate what they have learned. For long-term projects, this is often an exhibition of some sort that may be called a "celebration." This step gives closure to the unit.
5. Put the major learning outcome on the top of the page. Put the topic in the middle of the page. Using desired subject areas, brainstorm for suitable activities that will lead to and support the major outcome (curriculum wheel).
6. How will the achievement of the outcomes be assessed and reported?

Lincoln County. Bruce defined the being outcome that acted as an umbrella for their planning: developing students who would be "good next-door neighbours." They began by deciding one major outcome. It was to ask a meaningful question and answer it in a systematic way that shows respect for the environment as a part of the problem-solving process.

Following step 1 of the KISS model, this broke down into:

- know:
  - the criteria for a meaningful question
  - a systematic way to answer it (e.g., scientific method)
  - a way to answer it that respects the environment
- do:
  - develop a meaningful question
  - answer it in a systematic way
  - demonstrate a respect for the environment in your answer
- value:
  - ways that develop meaningful questions
  - ways that answer questions systematically
  - actions that value the environment

Bruce and Ron determined the subset of skills and knowledge needed to be able to achieve the major outcome for the course. These skills included problem solving, classification, developing a survey, charts, and tables, graphing, analysis, systems thinking, and information management. As well, students learned communication skills, presentation skills, and interpersonal skills through the activities and assessment procedures. The context for the learning was the scientific knowledge base. Activities were created that would lead to the major outcome. Assessment included demonstrations of the outcomes, self-assessment, and peer assessment.

When confronting issues of what to teach, the deciding factor was whether or not the skill and/or content would lead to the major outcome. This became very freeing, and they were able to explore new ways in engaging all students in the learning. Creating personally relevant learning experiences while focussing on the major outcome moved naturally into a more integrated curriculum that included English, math, and drama. Now, they understand first-hand how working with outcomes can lead to authentic educational experiences that transcend the boundaries of traditional approaches.

REFERENCES

Drake, S. M. (1993). *Planning integrated curriculum: The call to adventure*. Alexandria, VA: Association for Supervision and Curriculum Development.

Drake, S. M., & Miller, J. P. (1995). Determining exit outcomes: Two collaborative community efforts. *Changing times: Negotiating New Models of Education*, **1**(1), 4.

Spady, W. (1994). Choosing outcomes of significance. *Educational Leadership*, **51**(6), 18–22.

Craig, A. (1994). Preparing students for a new social order. *The Canadian School Executive*, **13**(8), 3–9.

Curriculum Lessons from Educating Exceptional Pupils

From Segregated Education to Inclusive Communities

ALDONA BALTAKYS

Head, Special Education, Cardinal Newman Secondary School, Hamilton-Wentworth Roman Catholic Separate School Board

The Common Curriculum, as a policy document of the Ministry of Education and Training, frames a new strategy for the delivery of programs which chart a new direction for education in Ontario. The Common Curriculum stresses respect and accommodates diversity. It professes to ensure equity and high achievement for all students including exceptional students, who are viewed as individuals for whom success in school is possible and desirable. Educators implementing the Common Curriculum in general education stand to learn some valuable lessons from the educational experiences of the exceptional pupil gained over the last 20 years.

This is innovative thinking; segregated education for exceptional students has been the norm for many school boards until very recently. Exceptional pupils have often been excluded from enrolling in and attending their neighbourhood school — or any school that was not specialized in their care — because they were perceived as too "hard-to-serve." Less-able learners traditionally have been viewed by some educators as incapable of learning much of value — thus, the common perception was that the exceptional pupil was doomed to academic failure. More-able learners, on the other hand, in some cases, have not been challenged adequately. Ministry of Education and Training policy now makes integration the preferred option, thereby making the inclusion of exceptional learners in the Common Curriculum a greater reality.

In integrated, inclusionary settings, alternative instructional and assessment modes have been applied successfully since at least 1973 as educators recognized better ways to make instruction more meaningful in preparing students to function outside the classroom. Individualized, relevant outcomes were the goals for all exceptional pupils. *The Common Curriculum* challenges educators to assimilate lessons from these past experiences and to make schools, in Eliot Eisner's words, "cultures for growing minds" — places where all students belong, are recognized, and can learn.

A Call for Changes in Philosophy and Technique

A close look at programming practices

for exceptional students can assist today's educator in meeting the needs of all students under the Common Curriculum. As a starting point, some philosophies and techniques need to be discarded, and this may be painful for some. The culture of the school must change to become one where each teacher is responsible for educating all students in the classroom; where everyone believes that all students can learn and succeed; where there are high expectations for all learners and expanded opportunities are available; where time is the variable and achievement is the constant. There must be emphasis on the right to education for the exceptional pupil who in many cases has been the responsibility of the special education teacher or the educational assistant (under the supervision of the special education teacher). With diversity as the new norm, segregation of any student is unacceptable, and the nucleus of instruction must adjust to improved educational outcomes for all students.

Deeply held assumptions must vanish, assumptions such as: "students are vessels that must be filled" or "students should be tested on what they know rather than on what they understand." The product-oriented classroom must grow into the process-oriented classroom where the emphasis is on "how" tasks, where the means of obtaining answers is as important as the answer. Content is only one component of the learning process. Learning occurs best when the student works through a process in which knowledge is actively manipulated and restructured to reach insight and when students are able to reflect on the process used to work through the content. The linear, staircase model of curriculum must be replaced by a more holistic model of curriculum, more like a spider web. The curriculum must be integrated, adaptable, free of bias, and a reflection of the diversity of people that make up our society.

Education needs a new philosophical framework and new attitudes similar to those that have been advocated by special educators committed to inclusion. Elements of this framework include assigning value to communication skills, quality rather than production, the ability to find commonality in diversity, equity, self-esteem together with a positive self-image of one's position and role in society, and the right of the individual to belong to a community of learners. New attitudes highlight that quality education is a right, not a privilege, and that creative alternatives will be available for those students not succeeding by ordinary means.

Tools Derived from Practice with Exceptional Pupils

In implementing the Common Curriculum, past and current integrated programming for exceptional students provides us with the initial direction and the specific tools.

The initial direction consists of a team-based collaborative approach to learning. When given opportunities to help each other in practical ways, students learn that they themselves are not helpless. Teamwork becomes the norm as each individual begins to care for one another and has some responsibility for everyone else. The success of each teammate depends on the success of every team member. Students adapt to each other's eccentricities, help one another, recognize strengths and weaknesses, and share thoughts and work. There is an acknowledgment that even the least-able learner can contribute to the group in some way. There is a cessation of focus on high, medium, low abilities and a move towards acceptance of a variety of intellectual abilities and multiple intelligences (see Gardner, 1993). Coupled with this is the recognition that different abilities are required to complete every task in the classroom; achievement depends on students using each other successfully as resources. Learning shifts away from an exclusive focus on specific skills that allows few students to be successful. The role of the teacher, as master leader, becomes teaching others to lead.

> Teamwork becomes the norm as each individual begins to care for one another and has some responsibility for everyone else.

What, then, are the tools? All work is individualized with no learner relating to the curriculum at the same time in exactly the same way. Differentiating the program to address the abilities, interests, goals, and needs of all learners requires changes to curriculum delivery: to content, process, product, and evaluation. Learners determine the shape and structure of activities as they deviate from the normal pacing arrangement for purposes of remediation or enrichment. Learning opportunities vary in depth and breadth. More-able learners explore topics more comprehensively or experience compacted curriculum. Less-able learners see timelines adjusted and curriculum narrowed in complexity and breadth. The attitude is one of continuous progress towards common learning outcomes and the improvement of the quality of instruction for all students.

The teacher draws from and modifies methods long used with exceptional pupils: developing activities that have relevance to real life situations, co-operative learning, task analysis where skills necessary to complete a task are broken down into component parts, provision of study guides, oral testing, granting additional time for tests and examinations, reinforcement through visual (charts, diagrams, pictures, etc.) and auditory aids (tapes), use of a multisensory approach, provision of more time to formulate oral/written responses. Modifications are made to tests/exams (e.g., simplifying the language and/or altering the format). Teachers allow take-home tests/assignments and encourage some students to use memory prompts. These are but a few of the techniques which expand the classroom teachers' repertoire of instructional strategies.

Through monitoring student progress frequently at each step, teachers can make assessments about which programs are working, which are not, which ones need to be improved, abandoned, or extended. A variety of instructional approaches to satisfy students' learning modalities and learning styles are used in order to maximize performance. Students are offered choices. In a concerted move away from performance-based evaluation, from an obsession with fact acquisition and recall, authentic assessment for all students approaches reality as each individual's progress is assessed.

Legislation mandates the formulation of Individual Program Plans (IPPs) for all exceptional students. These documents have tremendous potential as a practical mechanism for planning each student's educational program. For exceptional students, the IPP complements anticipated learning outcomes as it outlines differentiated instructional strategies in greater detail. For those few exceptional students for whom the standardized learning outcomes may be unattainable and/or unimportant in the context of their ability to function successfully in society, the IPP may replace those outcomes.

Community as Classroom — Classroom as Community

The educational experience with exceptional students teaches the value of community as classroom. It is in the community where exceptional students, through work experience and co-op placements, practise practical, academic, and social skills. Through these experiences, exceptional learners can make valuable contributions as citizens and thereby gain a sense of self-worth. Under the Common Curriculum, all students should have the opportunity to learn where learning occurs best for them and for many this includes the community.

There are exceptional students who are included in classrooms as community members and who, because of the severity of their disability or because of terminal illness, are not able to learn in the traditional sense. With the inclusion of these students comes an opportunity for them to become teachers — to teach their fellow classmates about caring, citizenship, humanitarianism, and the right to a quality life in community. Through interacting and working with these students, their classmates learn about responsibility, justice, compassion, tolerance, acceptance, and perhaps come to terms with some aspect of their own weakness or brokenness. They see demands for high standards of kindness and co-operation as well as for academic work. They learn that each human being brings with them a gift (not always immediately obvious) which they can share and through which they can enrich the lives of others. In some cases, through nurturing non-academic strengths, unmotivated students discover their motivation. This type of learning may also lead students to explore careers in human service.

Inclusionary Education

There are those who believe that making education inclusive will erode the quality of education. These beliefs may be grounded more in fear of the unknown than in fact or research. Scientific knowledge regarding the highly individualized ways people learn calls into question the prevailing policy of educating all students in the same subjects with the same methods and materials (Blythe & Gardner, 1990, p. 34). Using lessons learned from exceptional students and special educators, the teaching community acknowledges that all students can learn.

Exceptional students, included as members of communities of learners, leave a subtle but meaningful impact on education and learning. As James Boyd White says in *Justice as Translation*:

> What I mean by integration is a kind of composition ... a putting together of two things to make out of them a third, a new whole with a meaning of its own. In this process the elements combined do not lose their identities but retain them, often in clarified form, yet each comes to mean something different as well when seen in relation to the other. In this sense each element is transformed as it becomes part of something else, an entity existing at a new level of complexity. At the same time we, ourselves, are transformed as well. (1990)

Just as exceptional students have transformed the classrooms in which they have been included, the Common Curriculum has the potential to transform teachers and learners so that they can successfully meet the challenges of citizenship in the decades ahead.

REFERENCES AND SUGGESTED READING

Blythe, T., & Gardner, H. (1990, April). A school for all intelligences. *Educational Leadership*, pp. 33–37.

Bracey, G. W. (1993, March). Against ability grouping. *Phi Delta Kappan*, pp. 573, 574.

Brady, P. (1994, May). We must destream. *The Canadian School Executive*, pp. 11–14.

Brandt, R. (1992/93, December/January). On outcome-based education: a conversation with Bill Spady. *Educational Leadership*, pp. 66–70.

Brock B., Bializor, R.C., & McLaughlin, T. F. (1993, January). Effects of non-gradedness on pupils' self-esteem. *The Canadian School Executive*, pp. 11–13

Conley, D. T. (1993). *Roadmap to restructuring*. Eugene, OR: University of Oregon.

Craig, A. J. (1994, February). Preparing students for a new social order. *The Canadian School Executive*, pp. 3–9.

Curwin, R. L. (1993, November). The healing power of altruism. *Educational Leadership*, pp. 38–42.

Dixon, D. (1994, January). Future schools and how to get there from here. *Phi Delta Kappan*, pp. 360–365.

English, F. W., & Hill J. C. (1990). *Restructuring: The principal and curriculum change*. Reston, VA: NASSP.

Forest, M., & Pearpoint, J. (1991, December). Quality outcomes-driven Education. *Journal of the National Center for Outcome Based Education*, pp. 26–37.

Gardner, H. (1993). *The unschooled mind: How children think and how schools should teach*. New York: Basic Books.

National Association of State Boards of Education. (1992). *Winners all: A Call for inclusive schools*.

Ontario Department of Education. (1968). *Living and learning*. Toronto: Author.

Perrone, V. (Ed.). (1991). *Expanding student assessment*. Alexandria, VA: ASCD Publications.

Rhoades, J., & McCabe M. E. (1992). *Outcome-based learning: A teacher's guide to restructuring the classroom*. Sacramento, CA: ITA Publications.

Thornburg D. D. (1991). *Educational technology and paradigms of change for the 21st century*. Place of Publication?: Starsong Publications.

White, J. B. (1990). *Justice as translation*. Chicago: University of Chicago Press.

CLASSROOM ASSESSMENT:

Changing the Face, Facing the Change

By Lorna Earl and J. Bradley Cousins

This monograph is about student assessment. The authors take the position that the really important form of assessment takes place in classrooms on a daily basis. Earl and Cousins move beyond the research and provide an understanding of why classroom assessment practices are changing. They suggest some models of how they might change and assist teachers and principals as they work to develop the kinds of assessment practices that will serve their students well.

$10 each plus 7% GST

Cheque should be made payable to OPSTF and must accompany the order. GST Reg #R-107800369. Send to the attention of Ron Owttrim, OPSTF, 5160 Orbitor Drive, Mississauga, Ontario L4W 5H2.

New Practices for Teacher-Librarians

An Outcomes-Based Activity in Information Management

TIM GAUNTLEY

Library Consultant
Toronto Board of Education

The beliefs, features, and principles that inform the outcomes of the Common Curriculum come as no surprise to Ontario's teacher-librarians. *Partners In Action: 1992* mandated library resource centres to strengthen partnerships across the curriculum. As a result, today's teacher-librarians already try to model the Common Curriculum's learning, teaching, and curriculum principles. They initiate questions, pose problems, encourage connections, value process, and foster individuality among all learners and teachers. Especially, teacher-librarians design integrated resource-based activities for a range of abilities, backgrounds, and local needs, using a variety of inclusive experiences, methods, and resources.

Now, the Common Curriculum challenges teacher-librarians with new questions. How do curricular frameworks based on expected outcomes/results differ from instructional designs based on desired objectives? How does an emphasis on life-long learning forge different roles and partnerships across an integrated curriculum? How directly should teacher-librarians become involved in assessment and evaluation?

An Outcomes-based Activity

In the autumn of 1992, my library staff at Western Technical Commercial School faced such questions directly. We were wrestling with a continual intake of adolescent and adult learners with a bewildering range of information skills, knowledge, and values. We were not alone. That November, the Toronto Secondary School Teacher-Librarians (TSSTL) met to evaluate how restructuring was impacting on library resource centres and to begin an urgent revision of expected "library skills," in advance of the new *Partners* document.

In December, a three-day Outcomes-based Education conference with educator William Spady in Syracuse, New York, helped me to articulate new practices, especially in design and assessment. As the first semester closed, I tentatively began to redesign our library's traditional resource-based activities. I found outcomes-based education useful in constructing larger outcomes, planning with teachers for more complex performances, and helping students to value and demonstrate essential library skills. However, it was one colleague's desperation with his troubled Grade 9 English class that symbolized the paradigm shift from intentions to results and proved how challenging and rewarding effective an outcomes-based education design could be for teachers and teacher-librarians.

> Today's teacher-librarians already try to model the Common Curriculum's learning, teaching, and curriculum principles [and they] design integrated resource-based activities for a range of abilities, backgrounds, and local needs.

In this teacher's class, nothing was working. Precarious literacy skills were getting weaker as students demonstrated low task-commitment, eroding self-esteem, and chronic absenteeism. We began our partnership by designing an enterprise with a clear purpose, high expectations, performance-based activity, and expanded opportunities for success by all. Primarily, we wanted these at-risk students to know in the end that they had learned something of significance to their lives.

I suggested designing a short task to master the basic and vital skill of searching and locating information using an automated catalogue. Teacher-librarians seem to have this objective every year at every grade, but here the stakes were high and immediate. We had to insist on results: demonstrable success by learners who would be more responsible for their learning.

The Learning Model

I used a modified Spady model to plan the unit at the micro level, though at that time I had to create macro frameworks from which to draw. My wordprocessor and database helped create a design template for use in subsequent units. Today one could build my design from *The Common Curriculum* and Board responses, but at that time we had to begin from scratch. I adapted a mission statement from *Ontario Schools: Intermediate and Senior Division (OS:IS)* and revised it with feedback from my library staff. I constructed sample graduation (exit) outcomes to drive the performance expected using Spady's formula (valuing adjective + abstract noun + action verb + contextual objective phrase). I found my general learning outcomes from the "Skills Chart" in *Partners in Action* and grouped these skills with new and traditional resources and technologies into a program framework. The unit would specify indicators of performance. I later shared these outcomes-based education probes with the TSSTL's Restructuring Committee as we proceeded to forge a more comprehensive outcomes-based report.

My library lesson concentrated on three instructional strategies. First, I began with a grabbing example and an essential question. Second, I modelled the expected performance in my own performance and sample responses. Third, I shared the whole design with the learners in an atmosphere of clarity, caring, and high expectations for all.

I asked my fellow teacher-librarians to help monitor class activity and provide expanded opportunities to absent or weaker students on subsequent days. Figure 1 outlines the unit under the design headings adapted from Spady.

Figure 1

Using the Automated Catalogue: An Outcomes-Based Education Design

1. Mission Statement
   By nurturing the life-long skills and attitudes by which humanity thinks clearly, feels deeply, and acts wisely, the library resource centre will help each student learn, achieve, and excel, now and for the future.

2. Graduation Outcome
   Students will be self-directed learners who validate process, solve problems, appraise methods, and improve learning for themselves and others.

3. Competence Role Performance/ Learning Outcomes
   Students will seek, locate, and present specific information resources.

4. Attributes of Role-Performance
   Effective searchers, locators, and presenters should be accurate, efficient, and thorough.

5. Spheres of Living (for life-long personal fulfilment)
   Work and resource management.

6. Life Issues Topic and Question
   a) Topic: Information Access — Example: How to use the yellow pages, library resources, and the telephone to get the best deal on a new car.
   b) Question: What will be a vital skill in the future that you will need to function in life and on the job? — Answer: To use technological tools and information systems to access and apply specialized knowledge from various fields.

7. Demonstration Framework
   a) Resources: Non-fiction
   b) Technologies: Automated Catalogue
   c) Skills: Orientation and Organization

8. Culminating Demonstration
   Students will successfully seek and locate materials using the automated catalogue by each of author, title, and subject; score 100% on the questionnaire/ template; and present findings.

9. Quality Rubric
   A template containing instructions, three questions for three different topics (that require students to search, locate, and present material by author, title, and subject), and a modelled answer.

10. Daily Routine and Planning
    a) A class visit to the library resource centre, skills lesson, and work period, with templates handed in within two days.
    b) A class follow-up visit to present materials to class.

11. Validation and Grading
    Learners will receive an "A" for accurate, punctual, and complete templates and presentations in full sentence form, a "B" for accurate and punctual templates and presentations in point form, or a "0" if templates and presentations are inaccurate, tardy, incomplete, or not done.

We underestimated the time requirements. The work period had to be extended another day, the deadline extended three days, and the presentations done in class. Grading seemed rigorous, but since outcomes-based education had helped us define this as an essential skill, the expected result was realistic. The template was framed carefully and included a context for the role performance and competence expected, instructions for the individual topics, and a clear model answer. Figure 2 shows the opening paragraphs of the template.

Figure 2

Template: Using the Automated Catalogue

Now and in the future, you must become accurate, efficient, and thorough in your management of work and resources. You will use technology to access and apply specialized knowledge from various fields. To be an effective searcher, locator, and presenter of information you should demonstrate your knowledge of and skill in using the automated catalogue.

Today's activity will enable you to demonstrate your competence as a self-directed learner.

Your Activity: Each of the following topics will be important for you to understand in the future: Computers / Ozone Layer / Child Abuse. Find the automated catalogue and for each of the topics perform the following actions and record your findings in the spaces below. Use a complete sentence in your record as in the example below:

Grace Hopper wrote Understanding Computers. *Its call number is 025.12. It can be found in the Generalities area of the library."*

The Results

We were surprised by the behaviours. Of 20 students on the class list, it was rare for 10 to be present, yet by the second day 16 were engaged, with two more stragglers trying the exercise within the week. The library staff noted refreshing after-school activity by some. While a single work period proved unrealistic, on-task activity was strong during all work periods. Since all templates were individualized, group activity did not subvert personal discovery. In fact, as more students became skilled, they offered constructive support to less skilled peers.

We were also surprised by the graded results. I evaluated the templates, and the teacher graded the presentations. Ten students earned A's, six B's, and four 0's. Of the zeros, two were not handed in and two were absent for the entire unit. One student came up to us in the library days afterwards and said, "That was my first A in this school! I can really do this research stuff!"

However, the best result was a newfound confidence by the majority to move beyond this simple searching skill to more complex tasks in English and other subjects. The learner (let alone the teacher) could legitimately not only say that such an essential skill had been learned, but also prove that it had been learned well. That seemed to be a more authentic basis for self-esteem.

I believe that a common curriculum can motivate and assess fairly students of different abilities, knowledge, and skills. However, later experience suggested that destreaming without restructuring will not yield the desired outcomes.

Implications for Library Resource Centres

This experience and others that year had new implications for learning, teaching, and partnering in our library resource centre. Had we been fooled by weak assessment practices into assuming essential learning had taken place? Were we presupposing a social and psychological readiness to develop new skills without pretesting our perceptions or tackling this readiness in the way we structured and began library lessons? Could the seemingly overwhelming time and resource demands of library work be mitigated by planning a ladder of activities, a continuum of skills, reusable template designs, and a more systematic sharing of professional ideas and experience?

Above all, could teacher-librarians extend traditional library "skills lessons" (perceived by most of their departmental partners to be knowledge and content driven) towards a more transitional model of higher order skills (analysis, synthesis, and evaluation)? Could school libraries even help forge a transformational model that enables students to develop higher order competencies in real-life roles and contexts which transcend the boundaries of subject-based and school-based learning?

An Opportunity for Transformation

The opportunity for such innovations came rapidly enough. *Restructuring in the Library Resource Centre: An Outcomes-based Approach* was published by the TSSTL in November, 1993. This report contained a transitional model of comprehensive learning outcomes for libraries. In spring 1994, it formed the basis for the recommendations of both elementary and secondary teacher-librarians to *A Curriculum for All Students JK–Grade 9*, the Toronto Board of Education's draft response to *The Common Curriculum.*

That summer, the Toronto Board gathered teachers, parents, and curriculum staff to write its second version, with performance indicators for Grades 3, 6, and 9 in all program and subject areas. We began by including library skills in these individual indicators. However, by the end, an integrated transformational model of information outcomes emerged to support directly the graduation outcome that students would be able to "locate, evaluate, manage and use information effectively." Here was a developmental continuum of higher order competencies to improve student learning across the curriculum. Like the TSSTL report upon which it was based, this model transcended program and subject boundaries and invited the complex role performances which truly integrate the curriculum. Figure 3 lists the learning outcomes of the information model.

Figure 3

A Program Framework for Information Management from *A Curriculum for All Students JK–Grade 9*

Using Information 1
Students will define their information needs effectively and develop appropriate strategies to meet them.

Locating Information
Students will identify and locate information from a range of appropriate resources using a variety of information strategies. Students will select information from a range of appropriate resources using a variety of information strategies.

Evaluating Information
Students will comprehend the meaning and form of information from a range of appropriate resources. Students will assess diverse forms of information for usefulness and validity.

Managing Information
Students will organize information appropriate to purpose and format. Students will organize, review, revise, and edit information appropriate to purpose and format.

Using Information 2
Students will communicate and present information through a variety of activities and forms, understand the implications of information use, and develop ethical practices.

Conclusion

New curricular practices, including outcomes-based ones, require a climate of trust and constancy. However, "Restructuring" for the new library information centre remains a term fraught with irony. As Ontario's libraries are about to soar into the Infromation Age, cutbacks in staffing, budgets, and services often make them early targets. As *Partners in Action* celebrates over a decade of cross-curricular collaboration and integration, certain jurisdictions are systematically replacing teacher-librarians with technicians. As the Ministry's new draft *Information Literacy and Equitable Access: A Framework for Change* challenges teacher-librarians to assume a more complex role of education leader, information manager, and access agent, it inexplicably understates the curricular role of actually teaching students. Even the Royal Commision's *For the Love of Learning* failed to understand that school library information centres are above all curriculum centres, not mere repositories of "stuff," however electronic and wired that stuff is!

In the meantime, Toronto educators will have the opportunity to test and build on the Ministry of Education and Training's *Common Curriculum*, their own *A Curriculum for All Students JK–Grade 9*, and the provincial standards in English and mathematics. For the first time, teacher-librarians can see information skills, knowledge, and values and their own professional practice at the heart of a board's curricular life.

The Ontario Ministry of Education and Training has produced English and French data-based versions of *The Common Curriculum: Policies and Outcomes, Grades 1–9*, 1995 in FileMaker Pro format for Macintosh and Windows computers. These versions place the individual specific outcomes in a database and link them to the Ten Essential Outcomes (and their subsections). The database can be searched and sorted to find cross-curricular themes based on the outcomes or by word searches.

These files are available on the ONeducation CD-ROM being distributed to all teacher-librarians (or their equivalent) in Ontario schools. The files may also be accessed from the MET Gopher over Internet at the following address:

gopher@edu.gov.on.ca

You will find the files under menu item No. 4 (Schools), sub-menu No. 3 (Curriculum). The Readme file will explain the different versions available for downloading. The files may also be listed on the MET anonymous FTP site. Check the Readme file in the gopher for the address.

Facing the Change

Aligning Assessment with Curriculum

LORNA M. EARL

Research Director,
Scarborough Board of Education

J. BRADLEY COUSINS

Assistant Professor, University of Ottawa

The Common Curriculum includes many ideas that will ultimately have an impact on the way teachers assess their students. This article suggests some of the changes that are important to consider; nevertheless, we offer them with a note of caution. The lessons we have learned from school improvement efforts warn against making changes in assessment practice in isolation. Assessment reform is part of a broader socio-cultural context of schools. Assessment and evaluation practices do not stand alone in educational change. As Michael Fullan (1992) reminds us, "it is futile to implement one innovation at a time, even serious ones."

The changes that are occurring in assessment, and in education generally, are certainly serious ones but they are all part of an intricate fabric that is continuously being woven into different configurations. Everything that changes in schools will be reflected in assessment and evaluation, and changes in assessment and evaluation will influence all other aspects of schooling. What's more complicated is that all of this change is likely to be a continuous process that will never be finished. As changes are made, educators (and others) will consider the results in light of the demands of the context, make refinements or revisions to the practices, and go through the cycle once more, in an iterative fashion. Huberman (in Fullan, 1992) describes the metaphor for a rolling model of change as "not the orchestra, with its methodological rehearsals, but rather the jazz group, improvising continuously within the bounds of implicit understandings, even rituals, among its members about melodic progression." In this context, what is assessed, why assessment occurs, how assessment transpires, and when assessment happens are inextricably tied to changes and beliefs about other factors like curriculum, instruction, school organization, societal expectations, and, most importantly, leadership.

To effect change in assessment practice, then, we need to embrace and utilize a model of planned educational change (e.g., Fullan, 1991; Leithwood, 1986) and to consider the sorts of changes in assessment that we value from this perspective. In this article, we describe a number of dimensions where change is recommended and is already under way in assessment practices. These dimensions have been constructed from our reading of the assessment literature and discussions with many teachers. Consequently, much of this is not new to many teachers. Good teachers are always attending to these dimensions. What is new is that what has been implicit in many assessment practices is becoming explicit and formalized with clearly specified instructional goals and obvious connections between these goals — instruction and assessment.

> What is new is that what has been implicit in many assessment practices is becoming explicit and formalized with clearly specified instructional goals.
>
> —Lorna Earl and Bradley Cousins

Clear Curriculum Targets

Embedded within any discussion of assessment and evaluation of students is the question, What should be evaluated? This seemingly straightforward statement becomes more complex amidst the current debate about what really matters in schools. There are, and will always be, heated arguments waging about what matters, about what should be taught, and about the expectations we ought to hold for our students. These discussions about what future citizens will need to know and be able to do to be successful in a rapidly changing society will not go away. It seems quite clear, however, that the portrait of valued outcomes that will emerge is far more complex than was previously recognized (Stiggins, 1992). Defining worthy targets is currently a major under-taking in many school systems. Educators and others are grappling with the difficult questions mentioned above: What is it that we want our students to know, be able to do, and be like? What skills, knowledge, attitudes, and values will students need to succeed in the 21st century? Establishing these targets and breaking them down into manageable units is a daunting but not impossible task. The good news is that many examples are emerging from all over the globe. The Common Curriculum offers perhaps the first clear statement about the valued outcomes in Ontario schools. It can form a starting point or a way station in the ongoing conversation about what our students will need to cope with their futures.

Although subject-matter content will continue to have a place in schools, the nature of its use will undoubtedly change. As the amount of available information is increasing in a geometric progression, it is no longer possible for anyone to "know it all" and teachers need to decide what bits students should know, while recognizing that the important "stuff" to know is changing almost daily. When this is coupled with the incredible advances in technology that make it impossible for us to know what skills will be important in the future, it is clear that educated members of society are no longer the ones who know the most, but the ones who have learned how to learn and know how to find out and utilize what there is to know. As Messick (1984) indicated:

> At issue is not merely the amount of knowledge accumulated but its organization or structure as a functional system for productive thinking, problem solving and creative invention in the subject areas as well as for further learning.

Students are expected now to be self-directed, self-motivated problem-solvers who are able to work independently and in co-operation with others. Such emphasis is equally as important for students towards the lower end of the academic spectrum, although recent data (Raudenbush, Rowan, & Cheong, 1993) suggest that attention to higher-order objectives is more prevalent in classrooms that favour academically motivated students.

At the same time, we know from effective-schools research that achievement is enhanced when goals for students are clear and known to the students (Levine & Lezotte, 1990; Mortimore, Sammons, Stoll, Lewis, & Ecob, 1988; Rutter, Maughan, Mortimore, & Ouston, 1979). This is also one of the basic tenets of sound assessment. In order to make reasonable judgments about performance, the assessor should have a clear understanding of the achievement targets to be attained by the students so that these targets can be translated into proper assessments and clearly communicated to students. When students, as well as teachers, understand what is expected of them, they have a much better chance of reaching the expectations. As Stiggins says "students can reach any target that they can see and that stands still for them."

> In order to make reasonable judgments about performance, the assessor should have a clear understanding of the achievement targets to be attained by the students so that these targets can be translated into proper assessments.

If we are to do justice to the more complex and sophisticated expectations that are held for students, our means of assessment will have to become more complex and sophisticated as well. Overreliance on tests and exams limit teachers' ability to adequately assess the extent to which a broad spectrum of educational outcomes has been attained. Standardized achievement tests, and presumably most teacher-constructed tests and examinations, "inquire only into answers as end products. They offer no way to sample the wondering, investigation, data collection, or reflection that are essential to serious work well done" (Wolf, Bixby, Glenn, & Gardner, 1991, p. 46). Moreover, most testing procedures require individuals to respond in isolation from one another providing no opportunities for interaction or the "social nature of knowledge and its acquisition" (Leinhardt, 1992, p. 20). Since many of the educational goals that we value for students cannot be translated into items on a test, the range of methods for assessing students and providing a more complete picture of student achievement has grown and continues to grow.

A Multitude of Methods

Virtually every professional education journal or professional activity advertisement makes mention of "performance assessment," "authentic assessment," "portfolios," "process folios," and on and on. All of these assessment methods (and more) are exciting and useful additions to an assessment tool-kit.

Since no single procedure can possibly serve to assess all facets of learning, and there is growing awareness that assessment should become a part of instruction that provides feedback to guide further learning, teachers are searching for ways to enhance and expand their assessment practices. Madaus and Tan (1993) point out that there are really only three ways to test or examine people — all ways that have been used for centuries. An individual can be required to:

- supply an oral or written answer to a series of questions (e.g., essay or short answer questions or the oral disputation) or to produce a product (e.g., a portfolio of artwork, a research paper, a video, a computer program)
- perform an act to be evaluated against certain criteria (e.g., a chemistry experiment, read aloud, repair a carburetor)
- select an answer to a question or posed problem from among several options (e.g., multiple choice or true-false) (p. 55).

While a wide array of assessment activities are possible within these three categories, researchers have noted that teachers rely very heavily on self-developed paper-and-pencil devices (e.g., Anderson, 1989; Dorr-Bremme, 1983; Wilson, Rees, & Connock, 1989) and that this is particularly true at the middle school and secondary level. Increasingly, teachers are expressing concern that these tests are not sufficient, and a great deal is being written about alternative classroom assessment methods. There are a number of reasons for expanding the repertoire of assessment procedures to better reflect valued learning. Expansion of this sort is highly congruent with contemporary goals of education and with what teachers believe is important.

Current policy directions that emphasize the integration of subject matter and cross-curricular activities are also examples of a broader range of expected learning. Through all of this, many teachers are experiencing growing anxiety about their approaches to assessment. The traditional paper-and-pencil tests and exams, while being relatively easy to administer and to grade, tend to over-emphasize recall of knowledge and as such do not provide a strong match to current and evolving curriculum. This is not to say that paper-and-pencil tests are incapable of assessing desirable higher-order cognitive performance. Rather, in the main, such uses of tests are fairly limited. Tests and exams also take time away from instruction since they generally occur as summative exercises sometimes providing minimal or no feedback to students and are somewhat detached from the learning process. Finally, test anxiety, cultural differences, reading or writing deficiencies, and personal trauma are only a small sample of the reasons why traditional tests may distort the true picture of students' performance capabilities at a given point in time. Teachers are experiencing a growing unease that is leading them towards a number of alternative approaches to assessment that transcend the mere monitoring of student progress and focus on promoting student learning. Assessment is coming to be seen as integral to the learning process (Sizer, 1992; Wolf et al., 1991).

There is a wide variety of assessment methods available for teachers to use. The trick is to use the best method or methods to assess the outcomes of interest. See Figure 1.

Establishing Standards

There has been a great deal of discussion about the need for or the absence of standards in education. Unfortunately, this criticism is very vague and unclear. The concern begs the question, What are standards, anyway, and how high is high enough? The word *standards* has several different but closely related meanings. A standard is a reference point against which some kind of performance is measured. Additionally, the term implies a passion for excellence and habitual attention to

Figure 1 **Varieties of Student Evaluation Methods**

Anecdotal records, teacher journals, or log books
contain systematic and objective narrative records of student accomplishments, needs, progress, and behaviour

Checklists, rating scales, or performance charts
identify and record the students' levels of achievement or progress

Demonstrations and presentations
display presentation skills in small or large groups, inside or outside the school

Independent study projects
reveal skills such as organization, time management, setting goals, synthesizing, and interpreting

Input from staff members
extends an individual teacher's knowledge

Interviews and conferences with students
reveal unique information and expand first-hand knowledge about individual students

Paper and pencil procedures: examinations, tests, quizzes, essays
assess students' writing ability under a variety of conditions with a variety of models

Peer evaluation
extends the teacher's knowledge by having students make systematic judgments about one another's performance relative to program objectives

Performance assessments
assess the actual performance of a complex set of activities

Portfolios or continuous files
provide a comprehensive summary of student accomplishment

Process folios or files
contain a student's initial draft and completed work with accompanying journal entries which encourage reflection

Self evaluation
extends the teacher's knowledge by having students reflect on their own achievements and needs relative to program objectives

Seminars that include process, written materials, and oral presentations
reveal higher order skills such as collaboration, problem-solving, inquiry, synthesis, and evaluation by individuals or groups

Simulations or docudramas
reveal creativity, analysis, synthesis, and evaluation through the use of problem-solving, decision-making, and role-playing tasks

Student journals
provide a compilation of data which might include student work samples and records, attitude checklists, attendance reports, or records of community service

Teacher observations
include systematic, first-hand observations of a student by the teacher

Video or audio tapes and photographs
record a student's performance and accomplishments

Guiding Principles of Student Evaluation, Scarborough Board of Education, 1991 quality. Teachers need to pay attention to both meanings. They need to be clear about the standard (or standards) that they are using as a reference point and they need to provide information about what is excellent. This is particularly true because the assessment that takes place communicates our standards to those around us. When we assess, we are sharing what's important, what deserves attention, and what we expect as good performance (Herman, Aschbacher, & Winter, 1992). Unfortunately, there is still little agreement among educators (and others) about the standards that they use. Setting standards is perhaps the central issue in the struggle to accommodate universal expectations and individual accomplishments in a single system.

Teachers tend to use three different standards as reference points in classroom assessment — *norm-referenced* standards (comparing an individual's performance with the performance of other people in a defined group); *criterion- or outcome-referenced* standards (comparing a performance to some pre-determined expectation or criterion); and self-referenced standards (comparing an individual's performance with his or her prior performance). Each of these reference points is legitimate, and teachers tend to use all three at different times and in combination. Traditionally, as Wilson (personal communication) has observed, the three standards "actually exist as a kind of standards stew" that he calls "content-referenced group performance" and the distinctions among them are often blurred. When faced with any individual student's work, teachers are likely to pay particular attention to the content of the course, and what "content stuff" the student can produce. Then they compare that student's production to other students in the class, or classes (if the teacher teaches more than one section), or to all the students to whom they have taught this course. Finally, they make adjustments to the judgment based on the past performance and behaviour of the particular student (work turned in, attendance, work habits, etc.). This approach is most closely tied to the average attainment of some group of students. Unfortunately, the lack of clarity about expectations has made it difficult for anyone other than the teacher involved to disentangle the way any of these reference points were actually being used.

Increasingly, there is more interest in establishing standards on an a priori basis that describe the expected attainment regardless of current levels of achievement by the group. This kind of standard has emerged as important because it may not be adequate to continue measuring performance against existing levels. Living in a global society requires considering broader horizons and paying attention to future requirements, as well. Wiggins (1991) has proposed that what is needed in education are standards that are "specific and guiding pictures of worthy goals" against which teachers can compare their students' work — rich descriptions and concrete examples of quality performance. In his words, standards are objective, exemplary ideals that serve as worthy and tangible goals for everyone, even if some cannot (yet) reach them (Wiggins, 1991). These a priori standards can have many levels of sophistication. Standards can be set for the exceptional level of performance (e.g., Elvis Stojko's skating or Margaret Atwood's novels) or they can describe the expectations for students at a given age or stage. In the first instance, they are describing the highest level of excellence. In the other, they can describe appropriate goals that can be used for judging student performance in school. There is no one model of excellence that defines a standard. Instead, we need a variety of exemplars to make the expectations clear. In addition, these standards will be constantly evolving as we get a clearer understanding of the skills, knowledge, and values that students will need to equip them for their futures.

> Standards will be constantly evolving as we get a clearer understanding of the skills, knowledge, and values that students will need to equip them for their futures.

Once the standards of excellence are set, the resulting question is How good is good enough for the students I teach? To answer this question, teachers must establish the criteria or indicators for assessment of student work and define them in ways that make public what is being judged and the rules for judging. Once the indicators are clear, they lead easily to levels of performance and cutoff points for acceptable performance that can be used for scoring student work. In many places, these levels are being translated into scoring rubrics or scales that teachers can use in their classroom.

When assessment is based on a theory of learning as multidimensional, it is likely to result in profiles of growth. This not only more adequately represents the learning process and the learner as multidimensional but also enables teachers to identify different expectations for each indicator for different groups at different times and makes the expectations visible to others, especially to students and parents. Teachers can use this information to differentiate instruction for groups of students within classes and thereby ensure that all students are challenged.

Finally, when the important indicators of performance are clear and shared as statements of criteria, parents and students are more able to accept responsibility for learning.

From Decisions To Descriptions

Perhaps the biggest change we foresee in assessment practices will represent a fundamental power shift. It is likely that assessment and evaluation in the future, not immediately but over the next decade, will become a shared activity. Students and parents will often be part of the process and will expect to understand and participate in the decision making that results. Very simply, teachers will no longer work alone to evaluate students and to make the decisions. Instead, they will assess and describe performance in ways that can be used by others to make their own decisions — decisions from what and how to study, to plans for the future. Certainly teachers will continue to play an integral and important part in making the decisions but they will not have sole responsibility.

This shift is very similar to the changes that have occurred in health care. People no longer rely on doctors to make decisions about what to do about their health. It is much more likely that a patient enters a doctor's office carrying a magazine article that provides a list of questions to ask.

As consumers, we view doctors as the experts but do not give them godlike status. Ultimately we expect them to learn as much as they can about our state of health, to give us all the pertinent information, to guide us through various potential scenarios, to suggest a variety of alternatives, even to recommend a second or third opinion. But, we make our own decisions. The interesting part of the phenomenon is that doctors are the first to encourage their patients to make their own decisions. The profession has been burdened with too many malpractice suits, and there is too much uncertainty in doctors' work for them to be able to give guarantees or make promises. Instead, they see themselves as expert guides.

This same trend makes sense in education where the science is even less perfect. There are too many consumers; there is too much at stake; and there are too many alternatives to leave all of the power in any one person's hands. Teachers who want to serve their students well are beginning to seek out ways to share the evaluation process. They are positioning themselves at the forefront of the change by working very hard to make the assessments that they do visible to a diverse audience and by engaging in the discussions that will help their clients make wise decisions.

All of the elements that we have described so far can contribute to setting the stage for this shared decision-making. Teachers, students, and parents can use clearly defined targets, many assessment methods, and standards that are public and agreed upon to engage in the important conversations that can lead to better decisions. Teachers can also extend their own confidence in the descriptions that they offer by drawing on the expertise of two important groups of partners — other teachers and the students themselves.

Collaborating With Peers

Assessment and evaluation are fundamentally linked to a decision-making process often based on teacher judgment. As teachers struggle with the challenge of providing good information about their students, they are constantly faced with questions: How sure am I that I'm right? How much confidence do I have that I'm giving a fair and accurate picture of this student? These questions have always been important but they become even more critical as teachers are asked to make finer distinctions and judgments that will be used beyond their own classroom. It is particularly important that a teacher is sure about the judgments she or he makes if the results carry serious consequences for the student in decisions about program or placement. In measurement terms, these are issues of reliability and validity. It is not really important for teachers to know the technical nuances of these concepts, but they should realize that any assessment of a student is based on only a *sample* of behaviour (a test, term paper, homework, or observations, or a combination of many of these) not on all the possible behaviour that could be considered. The teacher's job is to gather and interpret enough information from enough samples to be able to describe the student's performance accurately and consistently. There is no one right way. The teacher gains additional insight by assessing over time in a variety of ways.

> There are too many consumers; there is too much at stake; and there are too many alternatives to leave all of the power in any one person's hands. Teachers who want to serve their students well are beginning to seek out ways to share the evaluation process.

One of the most powerful ways to increase confidence in assessments is to share the decision making. When teachers work together to establish criteria for judging their students' work, set standards, and make group decisions, it has many spin-offs. At the very least, it gives teachers confidence in their decisions and in their accountability to an outside community.

Teachers can participate jointly in student assessment activities in a variety of ways. They can work together to establish standards for evaluation; they can have discussions about their beliefs and dilemmas about assessment; they can participate in the joint construction of tools and instruments; and they can actually engage in shared assessment and evaluation. The shared understanding and division of labour associated with such efforts will, at least in the long run, reduce workload and the stress that normally accompanies assessment activities. There may be an initial period of adjustment until a comfortable and satisfactory working relationship has been established. Once this has occurred, teachers working together tend to enhance one another's understanding of instructional phenomena and objectives. They begin to develop agreement about the nature and quality of the instruments and approaches for assessing their students. As one teacher in a study of collaboration in schools put it:

> Two heads are better than one, and four heads are better than two. As long as they're there you get everybody's expertise involved and you have to end up being in a better position. Thinking about a problem by yourself can get you deeper and deeper, but together a fairly simple solution can evolve (Cousins, Ross, & Maynes, 1994, p. 458).

When teachers share their decisions about how to assess, they come to agree about their expectations, and there are fewer discrepancies in student assessment standards and procedures between grades and classes.

When teachers work jointly to assess and evaluate their students' work, many benefits accrue through these deeper levels of collaboration. Teachers working together and having shared exposure to students are more likely to develop a deeper understanding of both the curriculum and individual students. The following thoughts from teachers engaged in joint implementation help to illustrate:

> As far as evaluation goes, it's very helpful to see a child through someone else's eyes. Often [teachers] agree on evaluation, but discrepancies arise, and that is really good and a real eye opener. Sometimes the other teacher might be able to pinpoint a problem with one of your kids. They may discover that one of your kids can do something well, and you had never seen it. Or they may be the same little pain in their classroom as in yours. And you say "Thank you, I needed that!" (Cousins, Ross, & Maynes, 1994, p. 458).

Working together helps each teacher become more attuned to their students' strengths and possibilities as a person and a learner. It also promotes the kind of intense discussions of standards and evidence among teachers that lead to a deeper understanding of the expectations that they ought to hold for their students. As teachers share their experiences, their knowledge of their discipline and of what students in the past have done, and argue about criteria and students' work, they create a deeper thoughtfulness and more refined language about children and learning and establish procedures for making and communicating consistent judgments. This exercise becomes even more powerful when students are involved in the practice of setting and internalizing standards for their own work.

Involving Students

Teachers and school administrators are ultimately responsible for what happens in schools, but the people in schools who exercise control over whether to learn are the students. An effective school is a place where students learn to love learning for its own sake, where academic success and the motivation to learn is expected, respected, and rewarded (Renchler, 1991). Motivation, however, is an illusive commodity that is tied to a student's level of engagement. Research in this area suggests that the most critical elements in enhancing motivation are ownership and choice. When students have ownership and some influence in their own education, they invest time and energy and are more likely to experience what Csikszentmihalyi (1988) calls "flow" — a state of concentration and engagement that amounts to absolute absorption in an activity and a deep enjoyment of the learning. The most effective strategies for increasing motivation have to do with treating students as capable people, capitalizing on their knowledge and interests, and involving them in determining goals and methods of learning (Levin, 1994a).

When it comes to evaluation, it is ironic that teachers have lobbied heavily for teacher-evaluation practices that safeguard teachers' rights and that stress the need for teachers to understand clearly what the evaluation is about and to have an opportunity not only to respond to comments by the evaluator but also to structure the evaluation process itself. Student evaluation, however, is quite another matter. Students are rarely involved in the process and they are often denied the rudimentary guarantees of due process, even when these evaluations have important consequences for them (Levin, 1994b).

This alienation of students from the evaluation process is particularly troubling because evaluation as feedback is absolutely critical to learning. Students need to understand and internalize the criteria for excellent and acceptable performance in order to monitor learning and make the necessary adjustments. Even very young children can and do use feedback to make adjustments in their learning and move to the next stage. Students should be intimately aware of the criteria for judging; they should be involved in determining the ways in which evaluation will take place and in assessing their own and their peers' performance; they should have opportunities to profit from the feedback that results from assessment activities and to improve their performance; and they should be able communicators and decision makers about their progress.

> This alienation of students from the evaluation process is particularly troubling because evaluation as feedback is absolutely critical to learning.

When students are an integral part of the assessment and evaluation process, they increase their awareness of their unique talents and they begin to understand errors, difficult problems, and even failures as a natural part of learning and of life.

NOTE

This article is excerpted and adapted with permission from Lorna Earl and J. Bradley Cousins, (1995) *Classroom assessment: Changing the face; Facing the change*. Toronto: Ontario Public School Teachers' Federation.

REFERENCES

Anderson, J. (1989). Evaluation of student achievement: Teacher practices and educational measurement. *The Alberta Journal of Educational Research*, **35**(2), 123–133.

Cousins, J., Ross, J., & Maynes, F. (1994). The reported nature and consequences of teachers' joint work in three exemplary schools. *Elementary School Journal*, **94**(4), 441–465.

Csikszentmihalyi, M. (1988). *Flow: The psychology of optimal experience*. New York: Harper & Row.

Dorr-Bremme, D. W. (1983). Assessing students: Teachers' routine practices and reasoning. *Evaluation Comment*, **6**(4), 1–11.

Fullan, M. (1991). *The new meaning of educational change*. New York: Teachers College Press.

Fullan, M. (1992). *Successful School Improvement*. OISE Press.

Herman, J., Aschbacher, P., & Winter, L. (1992). *A practical guide to alternative assessment*. Alexandria, VA: Association for Supervision and Curricular Development.

Leinhardt, G. (1992). What research on learning tells us about teaching. *Educational Leadership*, **49**(7), 20–25.

Leithwood, K. (1986). *Planned educational change: A manual of curriculum review, development and implementation (CRDI) concepts and procedures*. Toronto: OISE Press.

Levin, B. (1994a). Improving educational productivity. Putting standards at the centre. *Phi Delta Kappan*.

Levin, B. (1994b). Education reform and the treatment of students in schools. *Journal of Educational Thought*.

Levine, D., & Lezotte, L. (1990). *Unusually effective schools: A review of research and practice*. Madison, WI: National Centre for Effective Schools Research and Development.

Madaus, G., & Tan, A. (1993). The growth of assessment. In G. Cawelti (Ed.), *Challenges and achievements of American education* (pp. 53_79). Alexandria, VA: Association for Supervision and Curriculum Development.

Messick, S. (1984). Abilities and knowledge in educational achievement testing: An assessment of dynamic cognitive structures. In B. Plake (Ed.), *Social and technical issues in testing: Implications for test construction and usage*. Hillsdale, NJ: Lawrence Erlbaum.

Mortimore, P., Sammons, P., Stoll, L., Lewis, D., & Ecob, R. (1988). *School matters: The junior years*. Wells, Somerset: Open Books.

Raudenbush, S., Rowan, B., & Cheong, Y. (1993). Higher order instructional goals in secondary schools: Class, teacher and school influences. *American Educational Research Journal*, **30**(3), 523–553.

Renchler, R. (1991). *Student motivation, school culture and academic achievement*. Oregon School Study Council, Vol. 35, #4.

Rutter, M., Maughan, B., Mortimore, P., & Ouston, J. (1979). *Fifteen thousand hours: Secondary schools and their effects on children*. London: Open Books.

Sizer, T. (1992). *Horace's school: Redesigning the American high school*. Boston: Houghton Mifflin .

Stiggins, R. (1992). *A new era in assessment*. Unpublished manuscript.

Wiggins, G. (1991, February). Standards, not standardization: Evoking quality student work. *Educational Leadership*, pp. 18–25.

Wilson, R., Rees, R., & Connock, M. (1989, December). Classroom practices in evaluation: A progress report from the ecology of evaluation project. *Research Forum*, pp. 4–7.

Wolf, D., Bixby, J., Glenn, J., & Gardner, H. (1991). To use their mind's well: Investigating new forms of student assessment. In *Review of Research in Education*, **17**.

The Ultimate Challenge in Teaching

Striking the Balance Between Curriculum and Assessment

GREGG BEREZNICK

Transition Years Consultant
Board of Education for the City of London

> Assessment of student learning is an integral component of Ontario curriculum and effective classroom practice.... Teachers need to employ a wide variety of assessment methods that are consistent with the instructional approaches used and appropriate for describing student achievement.
>
> *The Common Curriculum*, February, 1993

Curriculum and assessment are two essential ingredients required to create a stimulating classroom environment. Curriculum provides an outline of knowledge and skills to be learned, and assessment reflects back to the learner how well knowledge is being retained and skills are being refined. The competent teacher blends these ingredients so that they interact in a meaningful way for the student. Once this balance is struck, curriculum and assessment appear as one dynamic force serving to reinforce an individual's unique learning abilities.

The ultimate challenge in teaching may be striking a balance between curriculum and assessment. What makes such a task challenging is the ease in which one may lose control of both elements and allow one to dominate the other. This usually occurs when teachers fail to understand the true function of curriculum and assessment in relation to the learner. In order to illustrate this point, three stereotypical examples of teachers will be discussed. Two of the examples, "the Controller" and "the Collector," fail to grasp the true function of curriculum and assessment and allow one element to dominate the other. The third example, the stereotype of the one who masters the balancing act between curriculum and assessment, is "the Humanist."

The Controller

No doubt, the Controller is like many teaching professionals you have met before. She or he prefers to create an effect rather than work towards achieving results. It is the "dramatic moment" that Controllers strive to create. Consequently, the Controller sees the value of assessment in its ability to create the ultimate dramatic moment, "Judgment Day." The curriculum is taught, but the Controller utilizes it to set the stage for evaluation, usually a paper-and-pencil test. This evaluation, or Judgment Day, is the moment when students must prove themselves. There are no second chances because that would take away the dramatic effect.

> Curriculum provides an outline of knowledge and skills to be learned, and assessment reflects back to the learner how well knowledge is being retained and skills are being refined.

Judgment Day is usually a stressful activity because, again, stress adds to the drama. No real preparation for the big moment is provided. It just happens, never to be repeated. We have all been through Judgment Days and have probably questioned their value. The stress of the event overpowers our ability to gain any insight into how we learn.

The Controller's only real flaw as an educator lies in the inability to balance curriculum and assessment. Curriculum is delivered but assessment is not choreographed to reflect back to learners how well they are internalizing knowledge and skills. Curriculum dominates the world of the Controller, and assessment becomes its slave.

The Collector

Above all else, Collectors believe in the mystical power of numbers. Consequently, it is their goal to go out and collect numbers (marks). The more numbers they collect, the more mystical the experience becomes. Once all numbers have been collected, they are mixed together in order to create an overall mark or average. Obviously, it must be a correct reflection of the learner's abilities and achievements because it is a message from another dimension.

Collectors in our profession utilize curriculum experiences only to yield marks which they collect and blend together. This is more the work of a numerologist than a teacher because there is little concern for the student's self-concept as a learner. The student is at the mercy of the mystical powers of numbers in a fashion similar to the Judgment Day of the Controller. "Numbers don't lie" is an expression you hear from the lips of a Collector. Numbers may not lie, but they may not mean anything terribly significant either.

Like the Controller, the Collector has been unsuccessful in balancing curriculum with assessment in the classroom. Assessment clearly dominates the learning environment, leaving curriculum to serve by merely providing opportunities for number collection.

The Humanist

The Humanist is focussed on the progress of the individual student. Consequently, curriculum and assessment are viewed as having the potential to contribute to the student's self-image as a learner. The curriculum provides useful knowledge and skills, and assessment is utilized to reflect back to the learner her or his ability to ascertain the knowledge and skills.

The Humanist sees the necessity to balance curriculum with assessment in such a way that each supports the other. Humanists believe this balance is essential to fostering the student's image as a learner.

Becoming A Humanist

The Controller and the Collector may appear more as caricatures rather than real people. Surely, most, if not all, educators have a genuine concern for their students, and are all Humanists to an extent. However, within all teachers there is the Controller who will use assessment to create the same type of drama that they experienced back in their days as students. As well, there is the Collector who gains security through numbers. These inner voices have the power to dominate our perception and consequently impair our ability to serve our students.

Slipping into the Controller or Collector role may be a very seductive habit. However, like any other habit, it can be controlled through a definite desire to change for the better and, more important, through providing a focus for that change. That focus for educators is the desire to balance assessment and curriculum so that they complement each other and ultimately serve the learner. It is the discipline of balancing these elements that will beat back old habits and lead to the next stage of development. This next stage includes the use of multiple assessment strategies. Creating a list of assessment techniques, such as the one following, begins the process of discovering how assessment can be wide ranging and creative in its ability to reflect back to the student his or her emerging image as a learner.

Assessment Techniques

- written tests/oral exams to test knowledge, skills, attitudes
- performances to demonstrate achievement of outcomes
- notebooks/workbooks to give insight into the process of learning
- audiorecordings/videotapes to give accurate feedback
- rating scales (personal/peer) to develop student's ability to self and peer assess
- checklists to determine learning style, strengths, interests
- journals, personal or shared, to develop one's ability to communicate
- conferencing to gain insight into progress
- portfolios (personal/performance) to objectify learning process

A Compelling Intersection of Curriculum and Assessment

Student-Led Parent Conferences

JUDY CLARKE

Vice-Principal, Dr. Marion Hilliard Senior Public School, Scarborough Board of Education

She was seven years old. Aboriginal. Speaking softly, intently, in her mother tongue. A young woman in a baseball cap and jean jacket was seated closely beside her. I stood still, a visitor, transfixed by what was taking place.

Independently, the child conducted a progress interview with her mother. Using a word web in a scrapbook, entitled, My Writing, she addressed each word and sketch on her web by pulling work from her folder to demonstrate her points. Her mother listened, responded with questions, gesturing, while examining the evidence of her daughter's learning. I became absorbed by the rhythmic interchange of question and answer, the child's seriousness and mother's active and respectful engagement.

I was a guest in Winnipeg, on the Ontario spring break in March 1993, invited by a friend to observe student-led conferences one evening at an inner-city school. I returned home eager to try this way of reporting to parents.

Toronto: Nov. 30, 1993

At night, in my Grade 8 Scarborough classroom — Arabic, Hindi, Tamil, Urdu … the family languages of comfort bubbling from four parent conferences conducted simultaneously by four students in my classroom. Every so often, words in English popped out: "chronological time line"; "word web"; "graphic organizer"; "inductive thinking"; "metaphor." I moved about the classroom watching and listening as my students independently explained their learning. I heard parents question, probe, express pleasure, encouragement, and, occasionally, express comments of concern.

Most interviews spanned an intense 90 minutes of parent-child collaboration focussed on the achievement and goals of each child. In November, and then again in March, and in June … each time, all students in my class led conferences with their parents and, in a few cases, with surrogate parents. Taking part in each conference briefly, I offered, each time, to meet with parents afterwards, alone, if needed. Not one parent asked, in any conference, all year.

> In five schools over 24 years of teaching, I have never seen parents become so actively involved in exploring the real evidence of their child's learning.

We prepared ahead so that the students could discuss everything we thought which would be important in explaining learning to parents. Students used samples culled from their work collections and active "on-the-spot" performance demonstrations to provide evidence of their achievements, strengths, concerns, and goals. In five schools over 24 years of teaching, I have never seen parents become so actively involved in exploring the real evidence of their child's learning.

For many parents, who have lived in Canada for years, this conference was the first time when they understood, in depth, the learning processes and results of Canadian education. Additionally, many parents expressed their pleasure in participating in a serious, lengthy and constructive conversation with their young adolescent.

Following are examples of topics

addressed by students with their parents during the conferences:

- individual progress, strengths, and weaknesses, and how this progress "measured up" using self- and criterion-referenced standards
- standards which we developed collaboratively to define quality
- the process of generating criteria for success before embarking on assignments
- personal and social growth — evidence collected through anecdotal peer, teacher, and self reflections
- examples of knowledge and skills students learned through direct teaching and by investigation; and how they applied these learnings both independently and through co-operative small-group endeavours
- learning and evaluation strategies, such as visualization, graphic organizers, progress reflections, simulation and case studies, performance demonstrations, and differentiated assessment activities negotiated by students
- goals for the short term and long term (including ways to apply their learnings in their families and in the community)
- the advantages and challenges of our integrated study units and the "parts" of the integrated study which belonged to "history," "geography," "English," "computer literacy," and how these parts all fit together

Students taught their parents about the how's, what's, and why's of what we do in school in much greater depth than I have ever been able to communicate in the traditional teacher-led interview with the child present. In much more satisfying and illuminating specificity, students showed their parents the actual evidence of their individual achievement and how their progress measured against our standards for Grade 8.

Unanticipated Consequences

Asking young adolescents to discuss the why, what, and how of their learning on a daily basis quickly effected my role as the classroom curriculum umpire. What started out on the first day of school as my initiative — wanting students to reflect on the learning process and outcomes, quickly turned into a daily forum for insistent student voices. Sometimes I felt under siege with the students' authentic desires

---

ONTERIS AT OISE

Sharing Information Electronically

The Common Curriculum will be distributed in electronic form via the **ONeducation** CD-ROM. Copies are being mailed, free of charge, to all Ontario schools, school boards, faculties of education, and other education organizations on April 25, 1995.

ONeducation is a partnership of the education community:

- Ministry of Education and Training
- ONTERIS (Ontario Education Resources Information Service)
- OISE Ontario Curriculum Clearinghouse
- TVOntario

The CD-ROM project is managed by ONTERIS (OISE) to promote the electronic sharing and distribution of education resources in the province.

ONeducation transports a library of databases and full-text documents:

CD-ROM DATABASES:

- Circular 14 Learning Materials
- ONTERIS Curriculum Resources, Research and Reports
- OCC Current Transition Years Curriculum Resource Materials
- TVOntario Primary/Junior Catalogue

DOWNLOADABLE FILES:

- The Common Curriculum
- Engendering Equity (WordPerfect and ASCII)
- Circular 14 Learning Materials
- TVOntario Primary/Junior Catalogue
- OESS (Ontario Educational Software Service) Catalogue of Provincially Licensed Software

The Common Curriculum will be available in FileMaker Pro software, which has been licensed for the province by the Ministry. Those who have this software and a CD-ROM drive on their PC or Macintosh will be able to download the full text of The Common Curriculum and use it with FileMaker Pro.

Access to ONeducation is fully bilingual. Texts and databases are presented in both languages. For more information about ONeducation, please contact:

Rosemary McClelland
ONTERIS Project Head
Phone: (416) 923-6641, ext 2820
Fax: (416) 926-4745
email: rmcclelland@oise.on.ca

to understand the relevance of classroom activities and their scepticism of the adult educators' motivations in prescribing curriculum.

One day, as I spontaneously squeezed a new topic out of thin air, from a current world event, one student smiled to her neighbours and gently said, as an aside, unintended (I think) for my ears: "Here we go again with Ms. Intense Social Sensitivity." Stung , I paused and realized how much I have imposed my interests on my classes over the years without remembering to build bridges of relevance. For the most part, the younger children have co-operated with whatever I wanted to do (and however I wanted to do it), while the older ones have not always approached my interests with the same innocent compliance.

Thoughtful student debate about what should be learned, and how it should be learned and evaluated, was provocative for me. The questions asked by students fell into three categories: Why do we have to know this? What are alternative ways to gain and to express our understandings? and How can assessment be both fair and respectful for all learners?

Relevance was consistently a hot topic, partly, I believe, because each student was required to make sense of his or her learning in order to be able to express this to his or her parents.

Achieving the commitment of young adolescents in understanding their learning process and discussing it in depth required a strong emphasis on building explicit connections among the students' backgrounds, daily lives and future plans, and the curriculum activities. Therefore, relevance became a staple discussion item whenever we were entering our next area of inquiry.

Relevance was consistently a hot topic, partly, I believe, because each student was required to make sense of his or her learning in order to be able to express this to his or her parents. This accountability created a pressure on all students to understand issues of why. After the first-term conferences, when students had a more realistic grasp of their role in explaining their learning, their persistence in understanding issues related to relevance increased.

I wasn't always comfortable nor patiently understanding during student-initiated debates related to relevance. It was the first time in 24 years of teaching that my students insisted on understanding the appropriateness of what they were learning, how they were learning, and how they would be evaluated, up front in the learning experience, and daily.

More Difficulties

As hot as relevance could be in the class discussions, much more problematic for me was the issue of equity in a Grade 8 class of students with a wide range of behavioural dispositions, academic performance levels, educational experiences, and familiarity with English (there are 45 first languages in my school). Each student in the class was expected to chair a conference with his or her parents confidently in an organized fashion during which he or she would reflect on his or her learning and goals and show concrete evidence of achievement and progress.

After the class rolled through the honeymoon of the first week of school, I unearthed the students who presented as forgetful, distractible, lacking in self-confidence, discouraged, hungry, sleepy, irritable, or oppositional. My determination to create opportunities for all students to be successful increased as the challenge grew. After the first week of school, I started revising my teaching solely based on the need to enable all students to be successful in Grade 8, regardless of past performance or current disposition. This challenge continues to motivate exploration and growth in my teaching.

Next Year

Next year I am planning to use the outcomes from our report cards as the organizers for building portfolios, for collecting the evidence of learning. I think this will help students in making connections in their learning by drawing evidence from various subject clusters to support outcomes. We will use the provincial standards and more specific learning indicators to inform student reflection on their learning. Portfolios will provide the framework for the student-led parent conferences.

As my enthusiasm flowered along with my confidence after the success of the first term's student-led parent conferences, I began explaining to friends outside teaching what I was trying in my Grade 8 classroom. It was difficult to explain how multi-tentacled a change these conferences were for my teaching practices, my partnerships with students, and their learning. It remains impossible to adequately relate how challenging and open-ended is my search for teaching practices which support equity of outcomes.

It remains impossible to adequately relate how challenging and open-ended is my search for teaching practices which support equity of outcomes.

An Analogy

In talking to those who lack expertise in education, I began thinking of an area of my life in which I lack understanding: my car. In 15 years, in taking two different cars to an outstanding local service centre I have spent about 15 minutes, four or five times yearly in interviews, conducted by helpful and patient staff at the service desk. The maintenance and repair invoices resemble report cards — lines of text ending in numbers in the right-hand column. Yet after all these years of car interviews, I still do not feel confident in asking questions and do not understand very much about how a car works nor what happens in a repair bay.

I am curious if a mechanic-led conference, alongside my car, with tangible visual evidence and performance demonstrations is what I need in order to truly become an active participant in taking care of my car. This analogy, helpful in some ways in illustrating the limitations of paper profiles and "at-the-desk" explanations, does not begin to address the complexities of understanding student learning. After all, my car has no voice.

Concerns for the Future

Dialogue on the Common Curriculum, the Report of the Royal Commission on Learning, and the Minister's Announcements

In early March 1995, following the release of the revised *Common Curriculum, the Report of the Royal Commission on Learning*, and a series of announcements by Education and Training Minister Dave Cooke, *Orbit* Guest Editors Jack Miller and Ron Wideman sat down with three other educators — Professor David Booth, Teacher Karen Hume, Principal Jill Johnson — to discuss the future of Ontario Education. Ron acted as Moderator.

Ron Where's the Common Curriculum in relation to the Royal Commission's Report and the Minister's announcements on new foundations for Ontario education?

Karen They are very much in sync in their vision of what Ontario education can be. They have the same key elements; they have a concern for excellence, for equity, for partnership, for accountability, and both documents address the same manner of achieving those elements. They talk about technology, about integration, about helping kids to make connections. The Royal Commission supports some of the objectives of the Common Curriculum policy document, by talking about things like a curriculum clearinghouse. I have some concern that that same quality isn't evident in some of the Minister's statements, recognizing that the Minister's statements have to be fairly perfunctory for media release. There isn't the same talk about connection or integration. The Minister's announcements could be interpreted in a number of ways, but I think there's been an interpretation of "common" as a standardized view of curriculum, a one-way street instead of learning experiences that will achieve specific outcomes.

David I think the genesis is the same — parental concern. Where I find them different is in the voice. When you read the Report of the Royal Commission, you can hear the voices of the people, and they're human and personal, and you find real stories there. When you read the Common Curriculum documents, they are, of course, in the neutral voice of all documents. We seem to revert back, in those documents, to the old-fashioned "do this."

Jill I loved reading the Royal Commission because it made me reflect on what's happening in society and in education. And I felt hopeful and positive about the Royal Commission and the Common Curriculum until some of the announcements started to come out. I think we'll need to be very careful now that the Minister has announced 90 percent of curriculum will be provincially developed and 10 percent will be developed locally. That is a really significant difference from what the Common Curriculum says and I don't know how they're going to get around that. Also, the public is starting to think that because learning outcomes have been identified, somehow, every student is going to achieve them and that is not the reality of our schools. I am a little concerned about false expectations.

RON WIDEMAN

Curriculum Project Manager, TVOntario Children's and Youth Programming

Jack I'm more critical of the Royal Commission. I think that some of the material from the Royal Commission was really a springboard for the Minister's announcements, particularly the focus on more standardized curriculum, whereas I think the Common Curriculum's intent is to give a lot of freedom to the teacher; in other words, teachers can achieve the outcomes any way they choose. I'm really concerned about the creativity being taken out of the teacher's hands. The other problem I have with the Royal Commission is the language — particularly where they talk about the four engines of change. I think that to talk about engines of change is really just applying the factory model to education instead of using a more organic or naturalistic approach.

David I think it's the reverse! I think the Royal Commission gives freedom to teachers and the Common Curriculum does not.

Ron What about the Minister's announcement of the intention to develop classroom-ready materials? What will these have to look like to fit the Common Curriculum?

Jack The tension I see here is the need for consistency across the province, and at the same time the need for flexibility for teachers, because you can't achieve the outcomes for all students — given what we know about learning styles and multiple intelligences — with standardized means. I believe the idea of having a more coherent curriculum in the province makes sense, but I think we should look at principles first and not be so eager to rush in to provide a standardized curriculum. If it means everybody's on the same page at a certain time of the year, we're in a lot of trouble, though I doubt the Ministry will really go that far. I hope there's a move to the integration of subjects, which is integral to the Common Curriculum and is in the Royal Commission's Report as well. If the Ministry produces material in terms of separate subjects, then there will be a real incongruency. Will the new material lean towards the standards, which tend to focus on specific areas like language and math, or will they be more congruent with the four large areas of the Common Curricuoum?

Jill Teachers are very creative in their class; they know best what works and what doesn't work, and are able to change that as they go along. If the curriculum is extremely prescriptive, they do not have that option. So I have a real concern about classroom-ready or school-ready material, or whatever the Ministry term turns out to be. My hope is that Ministry curriculum will promote a strong engagement by students and — I believe this is what the Royal Commission talks about — the need for more complex thinking skills. Those are the significant changes we'll have to make if our students are going to survive in the 21st century. I also understand that what the public is asking for is a clearly defined curriculum. But the pivotal question is, what is it that students need to know?

Karen Curriculum is meaningless unless we start from the position of the kids, so it's very difficult to mandate the structure. As a teacher, I create my own curriculum. I start from a combination of my outcomes and my students' interests and then I, in conjunction with my class, decide on a product or some other demonstration of that outcome. Then I collect boxes and boxes of resources and surround myself with everything I can find on the issue or topic or theme. I keep in mind whole-class activity, small group, individual learning styles, multiple intelligences, cultural differences, specific needs of specific kids, connections that I am able to establish within my own community, and any number of other things. I then go through all of those resources to give myself some background information and to look for activities that are going to engage my kids and look for some starting points that the kids and I can jump from.

When I think of classroom-ready material in these terms, it's hard to imagine what they would look like. First of all, they would need to begin with outcomes, which is very difficult to do because we don't know which kids we would be addressing at which time in the year or at which time in their development. The material would need to include a variety of products or methods of demonstrating achievement of outcomes; it would need to provide some sort of annotated resource list and it would need to present a myriad different ways to help students achieve all the outcomes. It would need to address all the different forms of integration because these would be subject to the timetabling and organizational restrictions of each classroom. And it would need to take into account all of the other activities and experiences that might inform the outcome that aren't part of the official theme. It would need to include real objects or artifacts that teachers could use directly with students. So, for each issue or theme, you would end up with a document at least the size of one of the volumes of the Royal Commission's Report, if not more than that, which means, who would read it? These documents would then be given to board facilitators who would try to write executive summaries that teachers would be able to implement. We'd get into one of those cut and dried, "on Day 3 you do" — the kind of curriculum Jack is concerned about.

JACK MILLER

Head, OISE Niagara Field Centre

David I think it depends on what we mean by curriculum, by content, and maybe by skills and processes. If we mean, as Richard Courtney calls it, "to curric," as a verb — we find ways of learning — then I'm all right with it. But naturally my fear moves into the content range, that we want Canadian history, or we want these number facts, or whatever. How we go about that in an individual class, understanding the needs of our children, is much more complex and depends a lot on who's interpreting curriculum and what we mean by school-ready or by child-ready. I think we'll have to dig really hard for this one, and I'm hoping that we're going to get help from the Ministry.

Ron If you're starting from outcomes and from each individual's ability to achieve them, you need to have an idea of where each student's going. The Common Curriculum almost demands a student plan for each individual, not prescribed curriculum. It seems to me curriculum has to be flexible.

Karen Yes absolutely. As a teacher I'm interested in guidelines and I want standards, but I don't want to be put on the rails!

David Our Ministry has for years had very good guidelines that have been drawn up by teachers and by committees and approved by federations. There are some omissions and some things to update but nobody really objects to them. So, I think we've always wanted guidelines, they're useful, we can sort through them, we can see which ones fit our kids for those particular outcomes, and so on. I think if there's a wide understanding of what we all mean by curriculum, we'll be all right.

Jill I was thinking about *Science Is Happening Here* as a very successful guideline. So, hopefully, school-ready material will be more generic than prescriptive in terms of use of topics and some

“ Every time we minimize the results with a mark, we minimize what we can take from the children. ”

of the skills based on learning outcomes.

Ron One of the Minister's recent announcements is that every year all students will be tested at the end of Grades 3, 6, 9, and 11 in reading, writing, and mathematics. What are the implications of this announcement?

Jill I certainly see that we should be having assessment done at those critical stages, but it will be expensive and incredibly time-consuming. The turnaround time for Ministry reviews has been so incredibly long in the past that the information was almost useless by the time we got it. If we're going to do this right, we'll need to have that information at the board level, at the school level, so we can do something with it. Let's not just test kids and say, “Well, this is how they did.” I believe that if we want real information on a student, it's the teacher in the classroom who's able to tell a parent, or that child, or whoever needs to know, what the child is doing, where the child is going, what needs to be done to get the child to the next step, not the test that's done through the Ministry. That money could be spent in a much better way to help teachers design testing and holistic marking and to help them to find ways to observe children and interpret that information.

Karen I have no problem at all with ongoing assessment because I think that assessment and teaching go hand in glove, but I think that assessment and evaluation have to stay with the teacher. It has to be the teacher's responsibility. There's a very practical reason for that, and that is assessment has to be performance based. If the province comes up with a form of assessment that allows us to have our kids conduct demonstrations in class of their learning and to assess those against provincial standards and to send that kind of information into some sort of provincial collection spot, then I'm fine with that, because I think that would put the province in the role of helping teachers to be better assessors. If it turns into assessing lower-end thinking skills, because they're easy to quantify, then I think it province-wide testing will be a horrendous mistake.

David I really liked the Grade 9 assessment in language. I thought it was interesting. The kids did it as real work, not pretend work, and I read some of their responses and thought they were fine. The teachers thought it was too long, and that may be a problem, but the Ministry was struggling with the authenticity of the test, and I think that's admirable. I liked what a couple of you said about doing real work in a real room, but if we can't go there, can we at least make the tests simulate reality? Much of industry now is looking at what people can do and not necessarily their grades. And in America now the big-name private universities are requiring portfolios from their students. We're struggling in our schools with media hype and parental requests for marks, but I'm not sure that's happening outside schools where there's been a change in what assessment is.

Jack I basically agree with what everybody has said. I endorse performance-based or authentic assessment, and I agree with David that the English test was an attempt to move in that direction. However, I was talking to an English teacher the other day, and she said that the students in her class had a very difficult time dealing with it, as they still saw the test as artificial. They couldn't connect it to anything and asked her why they were doing it. So there's obviously still some problems to work out. I saw a study that was done in the United States that supports what David was saying, that the last thing employers were concerned about was student grades. The two most important things an employer is looking for are attitude and honesty. I'm really concerned about our being so wrapped up in the assessment end of things that we spend a lot of time and energy and money on that and lose our emphasis on instruction, on our concern with kids.

DAVID BOOTH

Professor, Faculty of Education, University of Toronto

Ron My experience with the Common Curriculum is that one of the chief barriers to its implementation is lack of understanding of assessment — the need to engage in diagnostic assessment, the awareness that assessment is formative, that you're constantly learning from it in terms of how to help children learn more effectively. I really hope that whatever testing is done at the provincial level will model those kinds of good practices.

Jill If the common curriculum is going to be successful, I think we're going to have to spend a fair bit of time working through some new assessment strategies. A lot of them aren't new; it's just that we haven't been using them.

David Every time we minimize the results with a mark, we minimize what we can take from the children. When you compare my son and his class and his school against Bowmanville or Ottawa or London, I don't know what you're comparing because you don't know what he's doing in his class. When I have a blood test done on my child, I want the information, and I want to know what to do about it. The more we attempt to narrow or to marginalize the diagnostic quality of testing, the sillier it gets.

Jill The unfortunate part is that parents give a standardized test so much weight. To them, it seems important to know where their child is, not in relation to any kind of program, but just in relation to other children. We have to start

> “... to do a decent job as a teacher in implementing the Common Curriculum, we have to know our kids, and we have to be professionally well read ...”

talking with parents and helping them see what assessment can and cannot do.

Ron The statement in the Common Curriculum is that assessment needs to be criterion based, not norm based in the sense of being a comparison of children in the class. That's a pretty hard message to get out to people.

Jill Our report card reflects what the child is doing according to the outcomes of the Common Curriculum, and parents will say to me, “Well, yes, I know that, but how's he really doing?”

David It's interesting that the parents don't seem to know how the child is doing. They seem not to notice at home — is he reading anything, is she writing anything, is she on the computer? They seem not to know if they're involved in a club on Saturday or working with their peer group. I wonder what they think is hidden. I think it's all the secrets we've had in schools for so long and suddenly they want those secrets, and there really aren't any secrets.

Jack I'd also like to endorse the move to portfolios as giving a truer picture of what kids can actually do. We're doing a study with four different boards with a number of different teachers at both elementary and secondary levels. We talk about educating parents. At OISE and in our faculties of education, we really haven't given them enough help in working with portfolios, so I think that's a big area that we need to work on.

Ron What must the role of the teacher be to implement the Common Curriculum?

David The wise adult who says: “How can we work together to help children learn the most and the best and with each other?” I really can't stress enough the collaborative nature of teaching. When the primary division has a philosophy, when the junior division works together, when the senior school has got a whole team looking at the kids, the child has a better hope of making it. I think we need all kinds of advice and help and interaction in planning the best programs for the complicated classrooms that we all teach in.

Jack I agree that collaboration is extremely important. Obviously the Common Curriculum is asking the teacher to move in the direction of integration, authentic assessment, and dealing with an outcomes-based approach. The only thing I want to say here is that, in the research study that we're doing, what's really coming through is the tremendous amount of stress that teachers are faced with right now. Some of the leaders in the schools, some of the people that are farther along in the area of integration and authentic assessment, are saying to us, they feel overwhelmed and they are looking for, as David Hunt would say, a renewal of personal energy. The cover of *Newsweek* last week had one word, “exhausted.” It was talking about the exhaustion level in society and I think it applies to our teaching profession. If we want teachers to deal with the Common Curriculum and the Royal Commission, we're really going to have to look at ways in which we can nourish and support them.

Ron In some parts of the world there seems to be a tendency to want to deprofessionalize teachers — they're just to deliver curriculum. Yet it seems to me the outcome from the Common Curriculum can't be achieved without the teacher being a professional decision-maker.

Jill If this is going to happen, it's going to happen in the classroom, as we know. I certainly see the teacher's role as extremely stressful nowadays, not just because what they're dealing with in the classroom, but because of all the media hype. I refer to myself as a “support person helping make it happen.” We have to help teachers, to be creative about giving them time to talk with their colleagues and work with their colleagues, and to give that type of support. But I don't want to make it sound as if everything is new in the Common Curriculum. Teachers have always known what it is they want children to be able to do at the end of their teaching; they've always had high expectations for their children; they've always wanted to maximize learning and to make exciting. But the demands on educators generally have become so unrealistic, I think we have to start clearing some of this, what I call “stuff,” and let teachers do their job — to teach children.

Karen In one of the courses I took at OISE I remember a professor saying, “Teaching well is probably impossible but we should all damn well try.” Implementing the Common Curriculum is a really tall order, but what keeps us going is that when it works well, it fits the title of my favourite education book, *Sometimes a Shining Moment*. It's reaching for the shining moment, working for the shining moment, that the Common Curriculum really allows us to do through integration and through making meaningful connections with kids. I think to do a decent job as a teacher in implementing the Common Curriculum, we have to know our kids, and we have to be professionally well read and I'm concerned that as a profession we aren't.

Ron My student teachers are always asking, “Where do you get those books? Where do you get those journals?”

KAREN HUME

Teacher, Lincoln Alexander Public School, Durham Public School Board

“Yes, we will move towards implementation, but I do not want false hopes raised out there with the public that every teacher in every school will have it all together.”

That’s a really hard question to answer because what book store do you know that carries them? It’s very hard to find materials. That’s why we have book clubs now.

Jill We have this wonderful book store that has all kinds of teacher books, and they’ll order anything that you want. It’s called Sweet Thursday, and there isn’t a book that she hasn’t got or isn’t willing to get. Certainly it’s an issue that teachers need to read more, and again it comes down to finding the time and the energy to do it.

David There are ways of helping teachers do that too — book clubs and book talks once a week or once a month, or groups getting together on action research and pooling their resources. I’m anxious that teachers get involved in projects together, because then we find out what you’re reading, what I’m reading, what we might read. That kind of motivation is personal and really significant.

Ron What’s your daydream and what’s your nightmare about the current directions in Ontario education?

Karen My dream is that we live the Common Curriculum and many of the suggestions of the Royal Commission: that we increase our accountability in real and meaningful ways for kids; that good teachers do more talking about what they do and enter the public arena to do that; that we collectively improve our level of expertise in this profession and be very proud of being teachers. My nightmare is probably the reverse: that we continue to close ranks and say, “We’re always being put upon.” If we continue to do this, we’ll find a misinformed and aggressive minority blaming every ill of the education system on things like process writing and integration of curriculum and the role of the arts. We’ll get mandated into lower order skill-and-drill rote learning, all in the name of progress. That one, for me, goes beyond even the definition of nightmare.

Jill I’m going to start with the nightmare first because I want to end on a positive note. First of all, I question how realistic the September, 1996 date is for the Common Curriculum. Yes, we will move towards implementation, but I do not want false hopes raised out there with the public that every teacher in every school will have it all together. My other concern is I want to be somewhat cautious about the emphasis on excellence and equity. I think we need a balance. Often equity is achieved at the expense of excellence, and often excellence is achieved at the expense of equity. As for my hopes and dreams, I’m very encouraged that the Ministry has Michael Fullan working on implementation. I think he’s probably our best hope right now. My first dream is that every person who comes into a school wants to be there because he or she wants to learn and we as educators can make that happen. My second dream is that teachers really begin to appreciate and understand how important their role is and how well they’re doing in some very difficult conditions. What keeps me going as an educator is that I know we make a difference. I really want teachers to appreciate what a fine job they’re doing.

Jack My nightmare for Ontario education, and some of it is in the Royal Commission but more of it is in the Minister’s statements, is a movement to more standardization and an industrialized model of education, where students are put through a kind of factory and seen as products and not as human beings. I think that a fragmented approach to life, to work, will only contribute to the ecological and social problems that we face on our planet. So my hope for Ontario education is that it really develops wise and compassionate human beings. There are pieces of this in the Common Curriculum and in the Royal Commission. Emerson said that the solution to every problem is really “soul, soul, and evermore soul.” My hope for Ontario education is to put the soul back into the classroom, to cultivate our spiritual life. I believe fundamentally that what we face are some very severe economic, social, and ecological problems and my hope is that education could really be part of the solution rather than part of the problem.

JILL JOHNSON

Principal, Crestview School,
Lakehead Board of Education

David I suppose that my dream is that teachers will realize their power, that they are so significant. I watch my boy in Grade 9; moving to high school was a great big deal. He has wonderful teachers, and they are more significant to him that I am at this moment. I watch their power, and I want teachers to have this dream of the responsibility that comes with that, not authority, but responsibility. I guess I don’t like the authoritative stance I read in so much of the Minister’s releases. I keep hearing, “we shall,” “they will,” “you can.” I want some of that responsibility for the teacher to make decisions. In the end those teachers are working with our kids, and it’s that relationship that really, really matters — whether they’ll stay with those teachers for a long enough time to have some impact and not drop out or quit or remove themselves mentally. I really want that relationship to develop and that’s why I think teachers have to have that responsibility. Not that they buckle under it, but they realize what thrilling, wonderful jobs they have, and the power that they have to work with kids to make something special happen.

Ron This seems the time to end. Thank you all for sharing your thoughts with us for this issue of *Orbit*.

ORBIT

Last Chance
Save 25%
When You
Order Now
$38.52

The Common Curriculum: The Shift to Integrated and Outcomes-Based Learning

Guest Editor: Jack Miller, Professor and Head of the OISE Niagara Field Centre, and Ron Wideman, Project Co-ordinator, Common Curriculum Project, Ministry of Education and Training

Education for the 21st Century: Discussion of the Report of the Royal Commission on Learning

Guest Editors: Michael Fullan, Dean, Faculty of Education, University of Toronto, and Angela Hildyard, Acting Director, OISE

Secondary School Change: Ontario Experiences

Guest Editor: Lynne Hannay, Associate Professor and Head of the OISE Midwestern Field Centre

Exemplary Practices in Ontario Education

Guest Editor: Lyn Cowieson, Superintendent of Schools, Simcoe County Board of Education

Order your subscription NOW!

SPECIAL
1995 rate
FOUR ISSUES
FOR $38.52
includes 7% GST

Prepayment Only

Name ______________________________
Address ______________________________
City ______________________________
Province/State ______________ Code __________
Phone ______________ Fax ______________

Mail Cheque or Money Order to:

ORBIT
P.O. Box 10 Station F
Toronto, Ontario M4Y 2L4

Phone: (416) 696-2295
Fax: (416) 696-2263

TVOntario Launches Curriculum Project

As a world leader in the development and delivery of outstanding curriculum programs, TVOntario is pleased to announce that its Children's and Youth Programming division is establishing the **tvo** Curriculum Project. This project will support the new directions in learning recently outlined in the Report of the Royal Commission on Learning and the announcements by the Minister of Education and Training. This initiative is intended to ensure that **tvo**'s curriculum programming is aligned with Ontario's new Common Curriculum and continues to meet the network's tradition for the highest standard of excellence.

Over the past 25 years, TVOntario has earned an international reputation for its outstanding curriculum programming, winning awards and achieving program sales in over 100 countries around the world. In the present period of rapid educational and technological change, **tvo** intends to work with a variety of public and private sector partners to ensure that its programs continue to meet the needs of Ontario students, teachers, and parents.

The Curriculum Project will make certain **tvo**'s curriculum programming for junior kindergarten to the end of secondary school is linked directly to the outcomes, standards, and teaching-ready materials of the Ministry's Common Curriculum. More specifically, the Curriculum Project will:

- review **tvo**'s existing curriculum programs to ensure they continue to satisfy the needs of students and society
- design and develop programs that incorporate a variety of interactive multimedia technologies such as videodisc, CD-ROM, and electronic networks to support classroom practice in Ontario schools
- package and support curriculum programs for easy access and effective use by teachers, parents, and other partners in education

TVOntario's Curriculum Project combines expertise in both curriculum development and television production. The team includes:

Ron Wideman, Curriculum Project Manager. While with the Ministry of Education and Training, Ron coordinated the development of *The Common Curriculum, Grades 1–9, 1993* and its successor *The Common Curriculum: Policies and Outcomes, Grades 1–9, 1995*. Previously, Ron taught history and social sciences in Scarborough secondary schools. He founded Scarborough's Values Education Centre in 1975 and served as Values Education Coordinator for a number of years. In that capacity, he co-authored *Together We Learn*, the Metropolitan Toronto School Board's curriculum writing project on cooperative small-group learning published by Prentice Hall. Ron's doctorate is in developing human resources and educational change.

Ruth Consenheim, Curriculum Project Officer. Ruth's teaching experience extends from kindergarten to the college level. She was founding vice-principal of Hazel McCallion Senior Public School, Peel Board of Education. This school runs both English and French-immersion programs and focusses on technology-enhanced learning and a strong outreach to the community. Ruth has worked as consultant and a resource teacher in elementary education. She is a TVOntario workshop specialist and has coordinated a quality education project for **tvo** and a cooperative education project for the Federation of Women Teachers' Association of Ontario (FWTAO). Currently, Ruth is pursuing doctoral studies in educational leadership.

Shelley Smith, Education Design Consultant. Shelley has developed over 100 educational video programs and supporting print materials for classroom use. These award-winning series include tvo productions *A Question of Justice*, *Work: The Inside Story*, *Business Concepts, Skills, Stopwatch, Applied Communication*, and *Keys to the Office.* Shelley brings a unique combination of experiences that include both television production and education. She has taught at the secondary and college levels and developed curriculum materials with the Ministry of Education and Training. Shelley is currently pursuing doctoral studies in the field of personal change and development.

The establishment of **tvo**'s Curriculum Project demonstrates **tvo**'s continuing commitment to produce the best in curriculum programming. In the next few months, the project will begin to publish a bulletin for teachers, parents, and students and to use TVO OnLine as an important communications resource. It will bring a new look to **tvo** curriculum programming to support the Common Curriculum. Improving service to the students and teachers of this province is one of TVOntario's central priorities.

Improving Service to the Students and Teachers of this Province is one of TVOntario's Central Priorities

Contact

Dr. Ron Wideman, Curriculum Project Manager
(416) 484-2600, ext. 5062

ORBIT

A co-publication of the Ontario Institute for Studies
in Education and Nelson Canada

Available for 1995

The Common Curriculum: The Shift to Integrated and Outcomes-Based Learning

Guest Editors Jack Miller, Professor and Head of the OISE Niagara Field Centre, and Ron Wideman, Project Co-ordinator, Common Curriculum Project, Ministry of Education and Training

Education for the 21st Century: Discussion of the Report of the Royal Commission on Learning

Guest Editors Michael Fullan, Dean, Faculty of Education, University of Toronto, and Angela Hildyard, Director, OISE

Secondary School Change: Ontario Experiences

Guest Editor Lynne Hannay, Associate Professor and Head of the OISE Midwestern Field Centre

Exemplary Practices in Ontario Education

Guest Editor Lyn Cowieson, Superintendent of Schools, Simcoe County Board of Education

Order your subscription now!

(416) 696-2295

IN THIS ISSUE

Context and Philosophy of the Common Curriculum

◆

Preparing for Implementation

◆

Some Approaches and Models

◆

Outcomes-Based Learning and Assessment

◆

Concerns for the Future

◆

ISSN 0030-4433 01